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**The study of COO effects on consumers perception:
the case study of Chinese laptop market**

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2010

A Dissertation presented in part consideration for the degree of
MA Management

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Abstract

Country of Origin (COO) effects has been subjected to a number of studies since the 1960s. Researchers suggest it is a highly context-based phenomenon that can give different results, depend on the nature of the studies. This dissertation seeks to find out how country of origin affects consumers' perceptions and purchasing decisions in the context of Chinese laptop market. Four hypotheses were constructed base on previous COO studies, which have provided theoretical basis for this dissertation. Both qualitative and quantitative researches were carried out through semi-constructed interviews and questionnaire survey. The result shows that COO has significant impact on Chinese consumers' perception towards foreign made and Chinese made laptop. Chinese consumers generally believe foreign made laptops are better-quality but more expensive; whereas Chinese made laptop are general poorer in quality, but the prices are more acceptable. However, at real purchasing situation, the COO effects decrease significantly, when consumers have access to the real product and have more information other than COO cue to evaluate a product. In addition, the result also shows that the level of COO effects on consumers' perception in the Chinese laptop market is positively associated with the level of consumers' education and income level. As their education or income level increase, consumers tend to give higher evaluation on foreign brand laptop, but give lower evaluation on Chinese domestic laptop. However, there is no strong evidence suggest the level of COO effects is associated with either consumers' gender or age difference. This study can help firms to gain an in-depth understanding of the Chinese laptop market. Base on the advantages that foreign and Chinese firms have, several practical managerial strategies were also discussed that aim to help firms to achieve further success.

Key Words: Country of Origin, China, Laptop Market

The study of COO effects on consumers perception: the case study of Chinese laptop market

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Chapter 1 Introduction

1.1 Overview

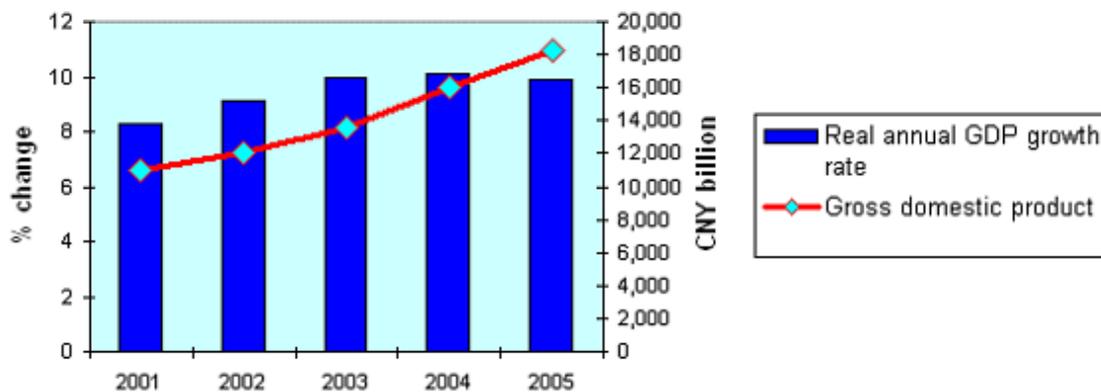
In the past few decades, the growth of international trade and globalization has led to a growing attention on products' competitiveness. Among many factors, a product's "Country of Origin" (COO) is believed of having significant impact on the product's international competitiveness, which has drawn great attention in literature. As Peterson and Jolibert (1995) describe, the COO effect on consumer product evaluation process has been "*one of the most widely studied phenomena in the international business, marketing, and consumer behavior literatures*". Bilkey and Nes (1982) explain consumer behavior of product evaluating from an information theoretic perspective. They suggest products can be seen as consisting many different information cues, which are either intrinsic, such as taste, design; or extrinsic, such as price, brand name. Where an information cue can be manipulated without changing the physical product, it then can be regarded as an extrinsic cue. Country of Origin (COO) falls into this category; other similar information cues include products' brand and price and so on (Verlegh and Steenkamp, 1999). Dichter (1962) was the first to argue that a product's COO may play an important role on the "*acceptance and success of products in the market*". Following this view, Schooler (1965) had been the first researcher conducted an empirical test on this subject. His finding verified the view that COO has a significant impact on product evaluation (Verlegh and Steenkamp, 1999). Since then, the "country of origin effect" has been the subject of a large number of studies. With such early development in the field of COO effects, one would expect literature to reveal a well understood recognition on COO effects. However, the reality suggests otherwise. Although many of the later research claimed similar result as early studies, they were mostly subject to a number of limitations of their study, which signifies there is still much need to be studied on COO effects. Davis (1971) "*Sociology of Interesting*" suggests what make a theory interesting is not because it is true, but rather because it denies certain assumption of audiences. As Peterson & Jolibert (1995) suggest, "*COO effect is still not well understood, and the effect is very much context-dependent*", which demonstrate the value of COO researches.

1.2 Background Information

1.2.1 Prospects of China Economy

Following the economic reform in the late 1970s, China has achieved significant economic improvements in the past few decades. The reform was aimed to accelerate China's economic growth. It started with gradually transforming the centralised economy to a more decentralised, market oriented economy. With such changes, price for products and production factors were gradually readjusted or partially liberalized (Lin et al, 2003). Another important strategy of the reform is featured with the so call "*Open Door Policy*", which aimed to attract foreign capital, allow foreign direct investment (FDI) to enter China market in the form of joint ventures or exclusively direct investment (Lin et al, 2003). According to UNCATAD report, since the mid-1990s, China has become the largest FDI recipient developing country. In 2005, China's FDI inflow has reached \$72 billion, and China has been ranked as one of the top three FDI recipient countries in the world. As a result of the economic reform, since 1978, China's GDP growth rate has kept at around by 9.5% per year, and according to the National Bureau of Statistics of China, the total GDP in 2007 has increased by 11.9% compare to that in 2006, reached 249530 billion RMB. The individuals have also become richer, with per capital GDP increased from 381 Yuan in 1978 to 16084 Yuan in 2006.

Fig. 1.1 China's GDP Growth from 2001 to 2005



Source: Chinability (2010). Available at: <http://www.chinability.com/GDP.htm>

Fig. 1.1 above shows that following the rapid economic development in the 1980s and 1990s, China's GDP has followed the rising trend in the 20 centres. By 2005, the GDP has achieved a figure of around 18 billion RMB.

According to Huang (2003), one factor that can explain the strong FDI inflow is the huge market size that in China. Foreign investors are increasingly realizing the potential profitability and the enormous market size that China can offer. Multinational companies no longer simply transfer their production line from their own countries to China to achieve the cost advantage. They are increasingly set China as their target market. In particular, after China became a member of WTO in 1997, the central government have taken further steps to encourage the market opening to outside world. Including improvements in legal systems, such as enhanced intellectual property (IP) protection regulations to protect foreign investors' interest (Tian, 2007); improved infrastructure in major regions and the introduction of "*special economic zones*", where offer a number of benefits, such as tax break to foreign investors.

As mentioned earlier, the rapid economic growth in China is also accompanied by the significant increase in the GDP per head, which implies the increase in people's living standard. Particular in the eastern costal regions, where absorbs most of the FDI inflows (Fung and Iizaka, 2002). The improved living standard and increased purchasing power have led to greater demand for better-quality products and services by Chinese consumers. Analysts predict that with the WTO commitments of reducing trading barriers, FDI will continually pour into China, and the demand for import goods will also increase. Among all types of goods, electrical machinery, such as computer, sound recorder and televisions has been the most imported goods in recent years (Morrison, 2006). In addition, the inflows of FDI have also been beneficial to local firms through technology spillovers, improvement of human capital formation, and establishing competitive business environment (OECD, 2002). The government also attempt to encourage and promote domestic companies to compete with foreign companies, especially in the high-tech industry (Morrison, 2006). As the computer industry development has long been the Chinese government priority, since the first "*long-term science and technology development plan*" were introduced in 1955 (Kraemer and Dedrick, 2002).

1.2.2 Prospects of Chinese Laptop Market

According to analysts, in the past few years, China's laptop market has achieved rapid growth with raising demand. The competition between brands is intensified and have kept driving price down. In term of sales volume, China laptop market has kept an increasing trend and predicted to keep the trend in the coming years. Statistics suggest around 10 million notebook PCs are produced in China each year, accounting for 25% of the world's laptop output (Business Weekly, 2003). According to CCID, the computer industry consulting firm, between January to October, 2007, the sales volume of laptop recorded a 4.755 million, which is a significant 44% growth compare to 2006. Guo Li, an analyst from a leading IT consulting firm in Beijing claim *“the laptop PC market is a promising market with plenty of room to grow in coming years”*, and he predict the revenue will rise around 30 per cent annually in the future few years (Zhu, 2004). There are a number of domestic firms and foreign firms are in China's laptop market. One would expect MNEs such as Dell, HP and SONY, would leading the Chinese Laptop market as in the worldwide market. However, the domestic firm, Lenovo have remained as the market leader in the recent years. According to statistics, in 2005, the company was holding 29.1 per cent of the market in term of shipment volume. Although Lenovo has been able to take the market leader position with a wide margin, the major players in China's laptop market are still foreign companies. Following Lenovo, Dell holds the second largest market share with around 14.3%, and HP with around 9.3% of the market share take the third place. The Japanese firm Toshiba holds 8.7% of market share following the American giants and come at the forth place, and Samsung with 4.9% of the market share squeezed in the top-five list. The Chinese domestic firm Founder Technology with 4.6% of the market share take the sixth spot, followed by the Taiwanese firms ASUS (3.8%), SONY (3.5%) and Acer (3.2%). The rest of the 18.6% of the market is shared by a number of other firms with small market share, which include the brand such as Apple, Haier, TCL, LG, and so forth (PHYSORG, 2005).

Fig. 1.2 Chinese Laptop Market Share Ranking

Company Name	Brand Origin	Market Share
Lenovo	China	29.1%
Dell	US	14.3%
HP	US	9.3%
Toshiba	Japan	8.7%
Samsung	South Korea	4.9%
Founder	China	4.6%
ASUS	Taiwan	3.8%
SONY	Japan	3.5%
Acer	Taiwan	3.2%
Others		18.6%

The study from Burns (2007) reported that in the 2007 Lenovo has further increased its market share to 34.1% with a 5% increase compare to 2005. The domestic firms Founder and Haier, who just entered the market recently, have also produced good performance and claim into the top ten firms with holding 5.1% and 3.3% market share respectively (Burns, 2007).

1.2.3 Chinese Laptop Market Characteristics

Although the demand for laptop has been increasing year by year, the competition among firms has also been increasingly intensified. In recent years, the market has demonstrated several new pattern of competition. According to CIDD, the current laptop market in China shows the following characteristic:

1. High Price Reduction

Well-known laptop manufacturers are gradually entering the China market, which have exaggerated the competition. Price reduction is considered as the most effective and direct method of attracting customers and increase market share. The demand for medium and low-end market is high in China. Therefore, simplified laptops will be the major products in the nearly future. Start with Lenovo, in 2007 mainstream manufactures lowered the bottom price to 3,999 Yuan (approximately £280) (CCID, 2008).

2. Demand Diversification

CCID (2003) report the majority consumers use laptop for Internet surfing, word processing, education, and entertainment purposes. To meet consumers' demand, market differentiation is becoming more intense as it has never been. The concept of laptop become even fuzzier with more special feature customised products enters in the market for different group consumers, such as student PCs (CIDD, 2010).

3. New Brands Enter the Market

With the rapid growth, China's laptop market is becoming more mature and stable; with few major players dominate the market. Firms with upstream resource have advantages in designing, pricing, distribution channels and product marketing. It is expected that the brand concentration will be more obvious as the competition become more intense. However, there are a number of domestic firms have entered into the market. It is not only because the huge potential in laptop market, but also the majority followers in the market are those with diversified operations in different market. By entering the laptop market they can indirectly enhance their brand reputation, opening new channels and enlarge service network (CIDD, 2003).

1.3 The Purpose of This Dissertation

Previous researches have provided strong evidence of COO effects on product evaluation. However, most studies were seeking to generalize the COO effects in a wide context, which might provide limited practical usefulness in business policy. As Hofstede (1980) indicates, theoretical models and frameworks that are developed in one socio-cultural environment might not be applicable elsewhere. Therefore, this dissertation will examine whether the COO related researches that developed in the western countries is applicable to China, which is one of the fastest growing economy in the world. Primarily, this study tries to answer the following research questions:

- (1) Does Country of Origin have significant impact on Chinese consumers' perception towards domestic made laptop and foreign made laptop?
- (2) What are the factors that are associated with the level of COO effects on Chinese consumers' perception in laptop market?
- (3) Whether COO effects play a significant role on Chinese consumers' purchasing decisions in choosing laptop?

1.4 Chapter Outline

This dissertation is divided into six chapters, which are outlined below:

Chapter 1 provides a brief introduction to this dissertation, and introduce the background of China and China's laptop industry; set the objectives and outline the structure of the dissertation.

Chapter 2 reviews the literature that related to Country of Origin, provide theoretical basis for later analysis.

Chapter 3 shows the conceptual framework and constructs the hypotheses that derived from chapter 2.

Chapter 4 describes and discuss the methods of research, including the methods in obtaining the sample and conducting the research, discuss possible limitation of the research and relevant ethical issues.

Chapter 5 shows the results from the carried out researches, trying to answer the research questions with critical discussions on the findings.

Chapter 6 draws conclusion of this dissertation, and provide practical managerial recommendations for both foreign firms and Chinese firms.

Chapter 2 Literature Review

2.1 Introduction

In order to gain a good understanding of how country-of-origin affects Chinese consumers' perception in the laptop market, it is essential to understand the concepts and theories associated with country-of-origin. In this chapter, a number of topic related studies and researches will be reviewed. The insights that gained from these studies will then be used as a theoretical basis for data collection in later chapter to draw meaningful and reliable conclusion.

2.2 Definition of Country of Origin (COO)

In the traditional view, a product's country of origin is where the product manufactured or produced. It normally communicates to consumers as an information cue by the "*Made in (country)*" label on the product (Bikley and Nes, 1982). However, in marketing literature, researchers have described the meaning of COO in many different ways. This is mainly an outcome of the growing trend of international trade, globalisation and MNEs, which has significantly changed the process of production and marketing consumer goods. One result of this phenomenon is the emergence of "*bi-national products*" (Chao 1993; Chao, 1998) and "*hybrid products*" that with components sourced from more than one country (Ahmend et al, 2004), which have create difficulties in identifying the meaning of COO. Furthermore, Chao (1993) divided COO into two specific aspects, namely the "*Country of Design (COD)*" and "*Country of Assembly (COA)*", which can influence consumers' evaluation on product's design and quality. For example, SONY is considered as a Japanese company, but its products can either be assembled in Japan, or other countries like Singapore or Malaysia. Therefore, the products assembled in Singapore would be labelled "assembled in Singapore" and the ones assembled in Japan domestically, would be considered as "made in Japan" (Al-Sulaiti & Baker, 1998). Johansson et al. (1985) define COO as "*the country where the corporate headquarter of the company marketing the product or brand is located*". It should be noted that, this definition recognises outsourcing possibility, which may cause the product not be

produced in the COO country, but assume the product or brand is identified with that country (Johansson et al, 1985). Quite Often, COO is inherent in many well-known brands. For example, IBM and SONY imply the product origins are US and Japan, respectively (Samiee, 1994). Kwok et al. (2006) conclude that there are various ways of measuring COO, which include the place of manufacture and ownership. In the case of China, it is inappropriate to define COO with either the place of manufacture or ownership. It is because in Chinese market, many foreign firms exist in the form of joint venture with local firm, especially in the early period of economic reform. Therefore, in this study, a foreign product is referred as where the brand is established or originated. For example, a SONY laptop implies a Japanese brand, and Samsung implies a Korean brand. The rationale of using brand origin as COO measurement in this dissertation is following Hui and Zhou (2003) argument, which suggests the incongruence between brand origin and country of manufacture, could produce a confounding effect in COO research.

2.3 Country of Origin Effects

One of the early widely referenced COO effects researches effects was conducted by Bilkey and Nes in 1982, which tried to find out whether COO affects consumer evaluation on products, as well as the magnitude of these effects. They suggest COO affects product evaluation, which includes products in general, products in different classes, products of different types and products with different brands. However, the study was embodied with some limitation, because of the methodology of employing COO as a single information cue on product evaluation might not exist in reality. Hence, the significance of COO effects is unclear (Bilkey and Nes, 1982). Following the Bilkey and Nes paper, a considerable amount of studies have been carried out to examine the COO effects. Both empirical observations and experiments indicate that COO plays an important role in consumers' evaluation of a product (Bilkey and Nes, 1982; Johansson et al, 1985; Olsen et al. 1993). One practical example of COO effects given by Bilkey and Nes (1982) is that a Puerto Rican shoe manufacturer may manufacture his production in New York, and then ship them back to Puerto Rico. Consequently, consumers will consider these shoes as being "made in New York". As previous experience had convinced him consumers have higher

willingness of purchasing, when the products are made in New York rather than made in Puerto Rica (Bilkey & Nes, 1982).

Janda and Rao (1997) claim most researchers agree use COO as a form of image variable in product quality evaluation, to the extents that COO have potential impact on the attention being paid to other product information. Such country image is defined as “*the overall perception consumers form of products from a particular country, based on their prior perceptions of the country’s production and marketing strengths and weaknesses*” (Roth & Romeo, 1992). Hong and Wyer (1989) support such view and argue that COO may affect consumers’ evaluation on a product directly or indirectly. They also explained how COO might influence consumer evaluation from four different ways. Firstly, COO cue may activate concepts and knowledge that affect the interpretation of other product information cues. Secondly, consumers may use COO as a heuristic basis to infer product quality and forgo the other product information. As people often consider Japanese cars, Swiss watches; French wines are good quality (Janda & Rao, 1997). Thirdly, COO is just the same as many other product attributes that can lead to the product evaluation. However, the magnitude of such effects may vary, depending on the recency with which it is presented and the relative salience. Finally, COO may also indirectly direct consumers paying less attention on other product information, hence reduce the significance of other product attributes (Hong and Wyer, 1989). This view mostly supported the argument that COO promotes consumers’ interest in one product, and directs them to think broadly about the product information and its evaluative implications (Janda & Rao, 1997). Eroglu and Machleit (1989) also verified this view with similar result, their study has shown that consumers use COO as an indicator to judge product’s quality, but the result shows the influence were subject to product categories, individuals and product variables. For example, consumers probably have quite different country image for Afghan rugs from that for Afghan television sets (Han, 1989).

Researchers realize the limitation of employing COO as a single cue in testing its significance in many early studies. Therefore, Johansson et al. (1985) examined the impact of COO on product evaluation with a different approach. Unlike employ COO as a single information cue, they take into account of other product attributes and used

a multi-attribute approach. The result shows COO effects are less significant under such condition. Base on their result, they conclude COO effects may not be as significant as what it has generally been believed, and COO effects seems more obvious “*in relation to evaluating other specific attributes than the overall product evaluations*” (Johansson et al.1985). Thus, their findings supported the view that only under the condition when consumers have constrained product information, COO will be used as a surrogate variable on product evaluation.

2.4 COO effects: Halo Effects Model and Summary Construct Model

2.4.1 Halo Effects Model

In marketing literature, a number of researchers have studied the COO effects on consumers' perception towards products. Han (1989) suggest that COO cue generally behaves in two ways to influence consumers' perceptions. They were recognized as the “*halo effect model*” and the “*summary construct*”.

The “*halo*” hypotheses suggest that when consumers face an unfamiliar product, they tend to use country image to infer product quality (Han, 1989), especially many goods are “*experience goods*”, and consumers often unable to detect the true quality before making purchase (Liebeskind and Rumelt, 1989). Previous studies in testing the COO effects have expressed the view that COO are used as a “*halo*” by consumers in overall product evaluation to different extent (e.g. Bilkey and Nes, 1982). Later studies by Johansson, et al (1985), although revealed different result, still support such view. They found that COO does not necessarily affect the overall evaluation of a product, but there is persistent evidence suggest a “*halo*” effect. Han (1989) also suggest two theoretical implications that derive from halo hypotheses. Firstly, consumers make direct judgment on product quality from country image (e.g. Peterson and Jolibert 1995; Verlegh and Steenkamp, 1999). Secondly, COO also affects consumer's evaluation of other product attributes. Such views has been tested and widely accepted by researchers. Hong and Wyer (1989) conclude that COO itself can directly influenced consumer evaluation regardless the availability of other attribute information. Johansson, et al (1985) also report that COO as a halo directly

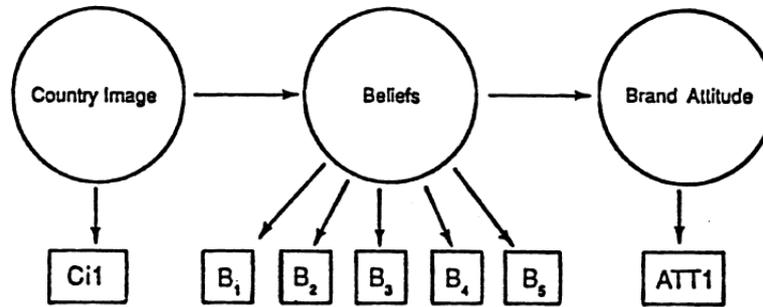
affects consumers' beliefs on product attributes and in turn indirectly affects consumer's overall perceptions on products through their beliefs. Thus, it can be concluded that the halo hypotheses suggest a two steps relationship from COO to product belief and result consumer brand attitude on the product (Han, 1989).

2.4.2 Summary Construct Model

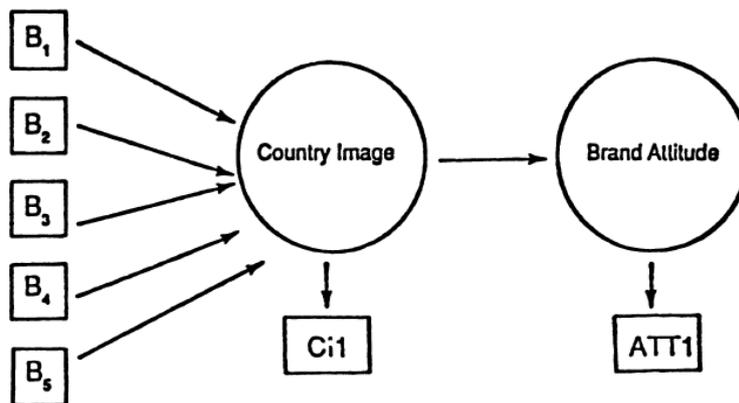
The halo hypotheses build on the assumption that consumers face an unfamiliar product. Han (1989) also offer an alternative "*summary construct*" view of COO effect, which base on the assumption that consumers are familiar with the product attributes. Under the summary constructed model, consumers perceive products from same country have same attributes by generate products information over different brands with same COO. Which means, in contrast to the halo hypotheses that consumers build their belief of product attributes through country image, the summary constructed model suggest an adverse process. Consumers have their beliefs in product attributes first, and then a specific country image is built on these beliefs. The country image in turn will have a direct effect on consumers' attitude towards a product with its COO (Wright 1975 in Han, 1989). Thus, the summary construct hypothesis suggests a relationship that product beliefs direct to country image and result the brand attitude (Han, 1989). For example, consumers might believe microwave ovens from a particular country are better than others. This is not because they judge product quality from the COO cue, but because they know that such product originating from that particular country do indeed have better quality. Under this situation, COO is used to eliminate brands and develop a certain belief in one particular brand rather than make inferences about quality. Thus, saving consumers from extensive evaluation of product attribute information (Agrawal & Kamakura, 1999).

Fig. 2.1 Comparison of Halo and Summary Construct Models

Halo Model



Summary Construct Model



Source: Adapted from Han (1989), p224

As the graph shows, under halo effects model consumers have their country image first, the country image direct consumers have different beliefs for products with different COO, these beliefs will then result different brand attitudes. In summary construct model, consumers have their product belief, these belief will direct different country image, hence different brand attitudes.

2.5 Information Process Framework of COO Effects

Obermiller and Spangenberg (1989) use an information process framework to explain how COO influences consumers on product evaluations. He suggests consumers' evaluation process through a cognitive, affective and normative processing of the COO cue. Verlegh and Steenkamp (1999) describe such framework as the best structures that review the current knowledge on COO effects. It should be noted that there is no clear boundaries between each processes, and these processes are indeed interacting with each other cannot be treated independently in consumer decision-making processes (Obermiller & Spangenberg, 1989). In the cognitive process, consumer simply use COO as a cue for product quality evaluation. COO signifies the overall quality and quality attributes of products. In the affective process, in addition to be a cue for product quality, COO also acts as an *expressive* or *image* attribute, which links the product to symbolic and emotional benefits, including social status and national pride (Verlegh & Steenkamp, 1999). In the normative process, consumers hold social and personal norms that related to particular product COO. To some extent, researchers argue that at where consumer ethnocentrism is strong, they take COO into consideration for product evaluation (Ahmed et al, 2004, Burning, 1997; Chrysochoidis et al, 1999). In such sense, as Shimp and Sharma, (1987) propose, individuals may consider purchasing domestic products as the *“right way of conduct”*, since it supports the home economy development. On the other hand, purchasing foreign products can be regard as *“immoral and unpatriotic”*, because it may pose adverse influence on the home economy (Ahmed et al, 2004). For example, Klein et al. (1998) found that Chinese consumers' animosity associated with war-factors toward Japan play an important role in their purchasing behaviour, despite the fact that Chinese consumers hold a positive image on Japanese products.

As mentioned earlier, each of the three processes cannot not be viewed separately and regard as independent determinants of preferences and behaviours. Affective process determinate the volume of information used in decision-making processes. It also motivates consumers to take further consideration of choice alternatives, and influence the evaluation of cognitive beliefs associated with the brand origin (Isen, 1984; Ger, 1991; Askegaard & Ger, 1998 in Verlegh, & Steenkamp, 1999). Normative judgments link with purchasing decision is also involve both cognitive and

affective processes. Normative process requires complex cognitive processing, as well as bringing affective process of personal emotions into decision-making process, which will affect their product preferences (Verlegh & Steenkamp, 1999).

2.6 COO effects in Consumers' Decision-Making Processes

Since the Bickley and Nes's paper, many of the studies in literature have been conducted with single COO cue, which is rare in the real world. People normally have access to many other different information cues besides COO when they make purchasing decisions (Agrawal and Kamakura, 1999). Studies have shown that COO cue actually become insignificant in product evaluation processes, when researchers use a multi-cue approach. Such view was supported by many researchers, Peterson and Jolibert (1995) used meta-analysis to examine fifty-two COO effects articles. They found studies through verbal product descriptions yield larger COO effect than with the presence of an actual product. As expected, single-cue approach studies produced larger COO effect sizes than multiple-cue studies. Verlegh and Steenkamp (1999) also adopted the same methodology and conducted comprehensive meta-analyses of the literature on COO, and they report similar findings. These reviews provide a practical insight on COO effects in product evaluation. That is, as Agrawal and Kamakura (1999) suggest, although COO plays an important role in product evaluation, such effects tend to become weaker as one moves from *"perception of product quality to attitude formation and to behavioural intention"*. Furthermore, when people engage in real purchasing decision-making activities, COO is normally regard as an information cue that competes with other product attributes. As a result, unless consumers use COO cue as an important input for purchasing decision, it is unlikely to have big impact on consumers' final decisions (Agrawal and Kamakura, 1999). This argument verifies Obermiller and Spangenberg's normative process argument (Han, 1989) of COO effects on product evaluation. A survey conducted in Asian countries support this argument, as 65% of the respondents claimed to *"buy the brands I like regardless of where they come from"* (Madden, 2003). As John Woodward, Leo Burnett's regional planning director in Hong Kong said *"Brand origin is not the key driver of the purchase decision, because Asian consumers are more interested in lifestyle and social values than politics"* (Madden, 2003).

Furthermore, there are many other factors, such as budgets constrain, and need urgency may further influence consumers' actual choice on products. Under such circumstance, COO is simply one of the several cues available to consumers, which confirm the argument made by Hong and Wyer (1989). In the decision-making process, consumers move along from perception of quality of different brands to brand attitude and arrives purchasing choice of decision, the significance of any single information cue, such as COO, may become very weak with the presences of other information cues (Agrawal & Kamakura, 1999).

2.7 Factors Contribute to COO Effects

Researchers have suggested a number of different factors that can contribute to COO effects. As mentioned earlier, COO is a form of image variable that influences the customer's perception of a product, which will also affect consumers' evaluation on other product information cues. To some extent, such view leads us to explain COO effects in term of stereotypes. The role of stereotype has been widely mentioned in many COO effects studies, and considered to affect formation of product image (Janda and Rao, 1997). It is generally referred as the typical tendency to engage in broad generalization and simplification of complex phenomena (Janda and Rao, 1997). Stereotype can be simplified as the example of considering the occasions that we evaluate a person from a certain country just on the basis of the fact that he or she is from that country. We may overlook many relevant facts about the person, and draw conclusions based upon our personal beliefs about the particular country (Janda and Rao, 1997). Ashmore and Del Boca (1981) perceive stereotype from a social culture process. Individuals learn stereotypes of various social groups both within and outside their societies, and this process could include influences through primary factors, such as family and secondary factors, such as the education they received and media influence (Janda and Rao, 1997).

Wang and Lamb (1980) and Ahmed et al (2004) suggest that one factor that result the COO effect is the economic development of home country. Consumers in developed countries tend to choose products from their own country first, following by products from other developed countries and then products from less developed countries. For

example, Peris et al. (1993) found more than two-thirds of Spanish and British respondents showed preferred to domestic products to comparable foreign products. Han and Terpstra (1988) suggest that the reason why consumers in many countries prefer their own domestic products is because of consumer patriotism. For one reason consumers with patriotism showing preference to domestic products on the basis of nationalistic feelings, for another reason, consumers also consider the quality and the service that they get from domestic products are better than they get from similar foreign made products (Chrysochoidis, 2005). However, studies found that such consumer perception and patriotism varies among different types of product. For instance, the effect of consumer patriotism on television sets is quite insignificant, whereas, it influences greatly on the perceptions of the quality of motor cars (Han, 1989).

In addition to the economic development of home country, researchers also claim there are also many other factors are associated with the level of COO effects. Bickley and Nes (1982) reviewed a number of studies that examined the factors that may determine the COO effects. They conclude although the findings do vary from different researchers, the level of COO effects is associated with demographic variables. Their research reveals consumers with different gender, age, income level, education background and ethnic groups have different preferences towards products made in more development and less development countries. Hoffmann (2000) also found gender and income level can determinate the significance of COO effects on consumers. He suggests male consumers are expected to pay more attention on COO cue in product evaluation, and people with high- income level are less concerned about brand origin. However, such finding is subjected to certain products. Hugstad and Durr (1986) also find that 70% of people in their sample that under 35-year old are less interested in taking the COO cue into account in their purchasing decision-making process.

Chapter 3 Hypothesis Development

3.1 Introduction

In last chapter, a number of COO related researches were studied, which have covered the definition of COO, different COO effects models and the factors that contribute to COO effects. In this chapter, hypotheses will be constructed base on the findings from previous researches. The rational that underling the hypotheses development will be set as following.

3.2 COO Effects in Overall Product Evaluation

Bikley and Nes (1982) reviewed a series of COO related studies and found most early studies indicate that COO has an impact on product evaluation to different degree. Han and Terpstra (1988) also indicate that many early COO studies have indicated the salience of COO in overall product evaluation. Recent studies, such as Johansson et al (1985) also suggest although COO might not affect consumers' overall evaluation directly, but consumers may use COO as a halo, which has an impact on the evaluation of different product attributes, hence affect the overall evaluation indirectly. In testing COO effects within different country context, Bikley and Nes (1982) compared consumers' evaluation on products from different countries with different economic development. A positive relationship was found between product evaluation and level of economic development. People in more developed countries tend to prefer domestic product, and people in less developed country often consider foreign products are better choice. In the case of China, Al-Sulaiti and Baker, (1998) claim that the country image of Chinese products have an adverse effect towards Chinese consumers' perception. These arguments lead to the first hypothesis:

H1: Holding other information cues have equal effect on consumers' perception. Chinese consumers' general perception on foreign made laptops and domestic made laptops are significantly different.

3.3 COO Effects in Product Cues Evaluation

Consumers in evaluating or making purchasing decisions for high-involvement products, such as laptop, they are likely to consider a number of product cues before reach the conclusion. The halo effect model of COO effects suggests COO has an impact on consumers' beliefs in other product cues. Hong and Wyer (1989) also suggest that one way COO affect consumer perception towards a certain product is COO cue may activate concepts and knowledge that affect the interpretation of other product information cues. This argument implies that consumers' perceptions towards different products cues are associated with the COO label. Consequently, contribute to the overall attitude formation towards a certain brand. Therefore, the second hypothesis is seeking to find out which product cues are perceived differently by consumers, hence contribute to the overall perception.

H2: Chinese consumers' evaluation on a number of product cues towards foreign brand laptops and domestic brand laptops are significantly different.

Nineteen different product cues are being tested within the questionnaire survey, which cover the four aspects of "product", "Price", "place" and "promotion".

3.4 Demographic Factors and COO Effects

Although researchers claimed the difficulties in determining the magnitude of COO effects in product evaluation, some studies were able to observe a number of factors that may have caused the different level of COO effects in different consumer groups. Demographic factors are one of the most widely studied variables. Bikley and Nes (1982) reviewed a number of earlier studies and found researchers suggest the level of COO effects to an individual in product evaluation is associated with one's gender, age, education level and income level. Later studies, such as Hoffmann (2000) also state the similar result in his studies, and found the existence of gender, income and COO effects correlations. But different result is expected depend on different product categories. Therefore, the third set of hypotheses will be formed as:

H3: COO effects in product evaluation are determined by the demographic variable.

To gain in-depth insight of how each independent variable affect consumer perception, H4 will be break into four sub-hypothesis, which are listed below:

H3 (1): COO effects in laptop evaluation are associated with consumers' gender differences.

H3 (2): COO effects in laptop evaluation are associated with consumers' age differences.

H3 (3): COO effects in laptop evaluation are associated with consumers' education background

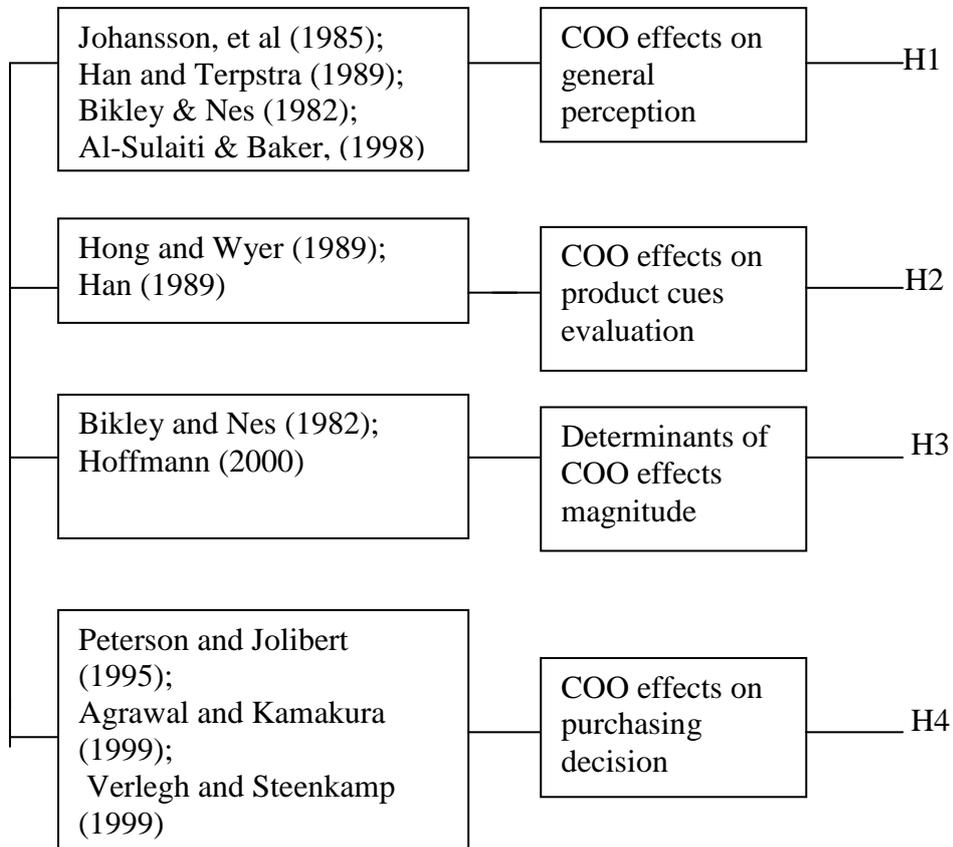
H3 (4): COO effects in laptop evaluation are associated with consumers' income level.

3.5 COO Effects in Purchasing Decision Process

Many researchers have claimed strong evidence of COO effects on product evaluation. However, many of those researches were criticized for having manipulated only the COO cue in their studies. To be precise, with other information being controlled, the result is likely to yield a high COO impact on product evaluation. Later studies argue the single-cue approach is unlikely in real purchasing situation, as consumers are normally provided with other information and have access to the actual product in such situation. Agrawal and Kamakura (1999) argue that COO effects are insignificant at real purchasing situation, when consumers are provided with other information cue together with COO cue. Peterson and Jolibert (1995) and Verlegh and Steenkamp (1999) adopt a meta-analysis approach and examined existing COO researches, they reported compare to single-cue studies, the COO effects are significantly decreased in multi-cue studies, regarding to both quality perception and purchasing decisions. Therefore, the forth hypothesis is:

H4: *There is no significant difference between consumers' purchasing decisions towards Chinese made laptop and foreign made laptop.*

Fig. 3.1 Summary of Hypotheses Development



Chapter 4 Research Methods

4.1 Introduction

The aim of this chapter is to describe the available methodologies that can be used for analysis purpose, and discuss the strength and weakness of these research methods. Base of the discussions, the best research methods will then be applied for this dissertation.

4.2 Research Design

Malhotra (2007) defines research design is “*a framework or blueprint for conducting the marketing research project*”. It is the foundation for conducting this dissertation. In order to gain a good understanding of COO effects on consumers’ perceptions and purchasing decisions in the context of Chinese laptop market, the research design in this chapter will specific the details and procedures that needed for obtaining essential information in solving the broadly defined research questions.

As the purpose of this dissertation is to learn how COO cue may affect consumers’ perceptions and purchasing decisions, and what demographic variables affect the level of COO effects. Two types of research design will be employed in this dissertation, namely, “*exploratory*” research design and “*descriptive*” research design. Malhotra (2007) states “*exploratory research is used to explore or search through a problem or situation to provide insights and understanding*”. The information obtained through exploratory research does not need to be clearly defined, but should be flexible and unstructured (Malhotra, 2007). Therefore, to carry out the exploratory research in this dissertation, the researcher will conduct an in-depth interview within a sample of 8 participants with different background information. Give the characteristics of the information gained from exploratory research; it might need a descriptive research to verify the insights that concluded from the interviews. Descriptive research enable researcher to describe the market characteristics and functions. Thus, a questionnaire was constructed to examine Chinese consumers’ perception on domestic brand and foreign brand laptop respectively. The questionnaire consist a number of factors that

may affect one's evaluation towards the studied products, and provides researcher with the information of what are the main determinants that may have had impact on product evaluation.

4.3 Data Collection

4.3.1 Secondary Data Collection

Secondary data is that gathered by others but not the researcher of this dissertation. It does not have to be developed for the current research purposes (Cowton, 1998). Malhotra (2007) addresses the importance of secondary data as "*a prerequisite to the collection of primary data*". There are many sources that can be used for secondary data collection purpose. In this research, the secondary data were mainly taken from textbooks, published academic research database, websites and so on. A great portion of the secondary data in this research has been used in the previous chapters, which provide the background information on China economic condition, Chinese laptop market and COO related concepts and frameworks. The secondary data collect in this study has enabled the research to build a comprehensive understanding of COO effects in consumer behaviour. To be precise, the secondary data help clarify or redefine the research questions and enable researcher to find possible solutions for the investigate problems. Cowton (1998) suggest the main benefits of secondary data also include the cost advantage and time saving, since they already exist and ready to use. In addition, the secondary data in this dissertation are from authorised source that conducted by experienced researchers, which has enhanced the reliability and the accuracy of the gathered data.

4.3.2 Primary Data Collection

In collecting primary data, as mentioned above, interview and questionnaire were used in this dissertation. That is, the primary data collection methods will include both qualitative and quantitative research methods. Researchers suggest the findings through qualitative research are not subject to quantification or quantitative analysis, (McDaniel and Gates, 2002), but it can provide rich understanding of the motivation and feeling of consumers' perception towards products with different COO labels. In such sense, qualitative research can improve the efficiency of quantitative research.

As quantitative research are normally aimed in describing the precise measurement of consumer behaviour (Cooper and Schindler, 2006).

4.4 Research Methodologies

4.4.1 Qualitative Research: Interview Objectives and Procedures

Interview is the technique that used in this dissertation for primary data collection in qualitative research. There are three types of interview that are commonly used by researchers, including the unstructured interview that aim to discuss limit number of topics but cover great details; semi-structured interview that involves with open-end questions, base on topic areas, but provide opportunities to discuss some questions into details; and the structured-interview, which similar to questionnaire to guide the question order and sometimes provide limited choices of answers can be selected (Hancock, 2002). Depends on the objective of researches, the special feature of each type interview can be considered as its strength or weakness. In this research, semi-structured interview questions were used as a qualitative research instrument. It can guide the direction of the interview, decide what questions will be asked during the interview. So that to explore the investigated problems.

The objective of the interview is based on the objective of the study, and has been divided into four parts. Purposely designed questions are used in each part to uncover how COO may affect consumer's perception or purchasing decision towards a certain type laptop. The interviews were also used as a complementary strategy to gain the insights that cannot provide by the quantitative research. (The full set of the interview questions can be found in *appendix 2*)

The four objectives of the interviews are:

1. To exam the significance of COO effects in consumers' perceptions.
2. To identify factors that contributes to COO effects in consumers' perception towards laptops with different COO label.

3. To examine the significance of COO effects in purchasing decisions
4. To examine the existence of other factors other than product cues associated with COO effects.

All the interviews were carried out by video camera via Internet, and recorded for analysis purpose. The interviews were followed with a 3-step procedures process:

- The first stage: brief introduction, which include asking the permission for video recording, a brief introduction of the nature, length (approximately 30 minutes) of the on going interview. Interviewees will be fully informed that the information they provided is fully confidential, and under any circumstances, they are free to withdraw from the interview as they wish.
- The second stage: conducting the interview; starts with fairly easy general questions.
- The final stage: interviewees were thanked for their participation and asked whether they have any additional comments on the process of the interview and the questions.

4.4.2 Interview Sampling Process

Sample size in qualitative research is generally small, due to the intensive and time-consuming nature of qualitative research. Qualitative research normally involves with non-probability sampling, which has little attempts to generate representative sample. The interview sampling methodology used in this study is purposive and judgemental sampling method (Schindler and Cooper, 2006). Participants are selected base on their unique characteristics, experience or attitudes. The majority respondents in this sample belong to the upper middle class which is the most active consumer group in laptop market, and whose lives are highly involved with PC or laptop. The small sample size of interviewees involved in this study may pose some limitation of unable to generalise the result of COO effects. However, the purpose of this interview is to provide in-depth and complementary insight to the quantitative result. It seeks to

generate insights from sub-group respondents that cannot be gained through descriptive research, and tries to address the “why” part of the result, rather than “how much” “how many” or “to what extent” (Hancock, 2002).

4.4.3 Qualitative Data Analysing Process

In analysing the mass collected qualitative data, the most important features of the data from the interview were reported, so that to provide the “*big picture*” of major findings. A content analysis technique was employed. The information gained through the interviews was consistently labelled or coded to recognize the differences and similarities among different respondents. The content analysis in this study is conducted on two levels. The basic level is the “*descriptive*” stage, which involve direct quotation describe what the respondent said during the interview. These information are reported under different section depend upon the aim of the question and the usefulness of the answers. The higher level of the analysis is the “*interpretative*” stage, the researcher tries to uncover the underline message from respondents’ answers, try to understand what the message implies.

4.4.4 Quantitative Research: Questionnaire Design

The quantitative research in this dissertation is conducted by the survey method, from which information obtained base on questioning respondents. A questionnaire was design based on the literature review and feedback from the interview. The formal questionnaire was prepared with fixed-alternative questions regarding to consumer’s perception towards laptops with different COO label.

Questionnaire methodology is criticized for lacking of effective theoretical framework that can be applied in designing questions. To reduce the adverse effects of such weakness, the questions developed in the survey were based on MaCathy (1960) 4Ps of marketing mix. Therefore, the questionnaire covers four basic elements of marketing strategic positioning, namely, product, price, place and promotion (Baker, 2000) that in related to laptop, as that shown in Fig. 4.1.

Fig. 4.1 Questions Related to Marketing Mix

Marketing Mix	Product Cues	Question Number
Product	Product Quality	Q1
	Product Appearances	Q2
	Technological Advance	Q3
	Product Workmanship	Q5
	Brand Reputation	Q6
	Product Functionality	Q7
	Product Safety	Q8
	Product Durability	Q9
Price	Price Competitiveness	Q10
	Seasonal Pricing	Q11
	Value for Money	Q12
	Discounts	Q13
Place	Market Coverage	Q14
	Sales Distribution	Q15
	Product Availability	Q16
	16. After sales services	Q17
Promotion	Advertising	Q18
	Sales Force	Q19
	Publicity	Q20

As the MaCathy's "marketing mix of 4Ps" itself was not clearly defined, the classification in this study may also incorporate with some questionable issues. Nevertheless, the questions designed under the four elements should provide adequate dimensions in testing consumers' perceptions in the laptop market.

In generating the answers from respondents, “*likert scale*” response format was used to require respondents to indicate their perceptions on each aspect of Chinese domestic brand laptop and foreign brand laptop respectively. To conduct analysis, each question is assigned with a numerical score, ranging from 1-7, where 1=very poor, 7=very good.

4.4.5 Questionnaire Structure

The questionnaire was constructed with four different sections. The first section is the introduction section, which introduce the nature and purpose of the research. Respondents are also informed about the information that they provided are fully confidential, they may withdraw from the research at any circumstances as they wish. In the second section, respondents were asked to indicate their perceptions towards Chinese domestic laptops on different aspects, as shown in the table above. In the third section, the same questions that in section two were asked again, but regarding the perceptions towards foreign brand laptops. In the final section, respondents are asked to provide their personal information, including gender, age, education level, income level. As researchers suggest questions should be constructed with easy general questions at the beginning and sensitive questions should be ask at last. In addition, the questions were translated into Chinese with back-to back translating method, to enhance the reliability. The finished questionnaire was post on the website: www.freeonlinesurvey.com for data collection.

4.4.6 Questionnaire Sampling Process

Without question, within a certain range, the bigger the sample size, the less likely the sample error would occur. There are several formulated model can be applied in determining sample size, which associated with population size, desired interval range or other statistical measurements. However, due to the enormous population size in China, and the nature of the research, it has restrained the available methods in determining the sample size in this dissertation. Therefore, a convenience sample was used in this study, as this is the easiest and cheapest way to conduct.

4.4.6 Quantitative Analytical Tool

After the full set data was collected from the questionnaire, the next step is to analyze and report the analysis result. SPSS software was used for analyzing the relationship between variables and testing the validity of the constructed hypotheses. Data were prepared and entered into SPSS, a number of tests were run to examine whether Chinese consumers' perceptions towards laptops with different COO label are significantly different, and to what extent are they different. The question of whether demographic factors are associated with COO effects was also tested. The details of the tests and results will be shown in the next chapter.

4.5 Pre-Testing

In order to ensure the interview questions and questionnaire are clearly represent and understandable by the respondents, so that to evoke clear understandable answers. A pre-test was run before the full set data was gathered. For pre-testing the interview process, two interviews were carried out. During these two interviews, the researcher was not only paying attention on the answers that provided by the interviewee, but also look for if any misinterpretations by the interviewees and other general reactions of respondents. Where applies, the questions or interview styles will be modified for better results.

For pre-testing the questionnaire, interview was used to verify the quality of the question presentation. Following the pre-test, the content, order of word and the order of questions were modified into a more logical way. In addition, reliability test by SPSS was also performed to evaluate the internal consistency of the nineteen product cues, and test the reliability of the questionnaire. The result can be shown in Fig. 4.2.

Fig. 4.2 Reliability Test Result

Variables	Cronbach's Alpha
Product Aspect Cues	0.821
Price Aspect Cues	0.830
Place Aspect Cues	0.809
Promotion Aspect Cues	0.711

Gronbach's alpha coefficients fall in the range between 0.71-0.83, which was above 0.7, indicate a good internal consistency.

4.6 Limitation of the Research

Although this dissertation has employed both qualitative and quantitative research methods, which expect to enhance the richness, reliability and validity of the result. Nonetheless, due to the nature of the study, there are a number of issues need to be addressed. Firstly, due to the time constrain, the sample size employed in this study was fairly small. The research was carried with computer-aid methods, which require the respondents are generally having access to computer and Internet. Consequently, the result may not be able to generalize for the whole population in China. There is lack of pre-training for the researcher in this dissertation. In particularly, the researcher has found a number of difficulties in using SPSS software to analysis the quantitative data. Therefore, the researcher may not have explored the full benefits of SPSS in data analyzing.

4.7 Ethical Issues

Base on the nature of this research, there are a few ethical concerns that need to be addressed. As the interview involves with video recording, before conducting the interview, respondents were informed and their consent obtained prior to the start of the proceeding. The comfort level of respondent in the interviews were also addressed, it was ensured that the respondents were not pushed beyond a point where make them feel uncomfortable. If the respondents were not willing to answer a question or discuss a question in details, the interviewer would not continue with the question. The anonymity issue was addressed, permission were sought for disclosing the respondents' personal information that shown in the dissertation. In conducting the questionnaire, the scale descriptors were carefully selected, so that to ensure the reliability and the balance of the responses. The length of the questionnaire was kept short, and clearly represented. Sensitive questions such as personal information are represent to reduce the possibility of invade respondents' privacies.

Chapter 5 Results and Analysis

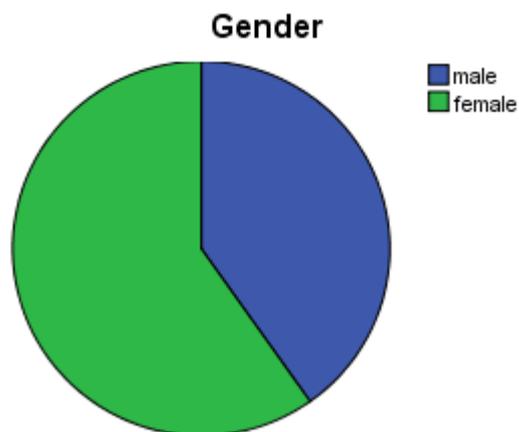
5.1 Quantitative Research Result

5.1.1 Descriptive Analysis

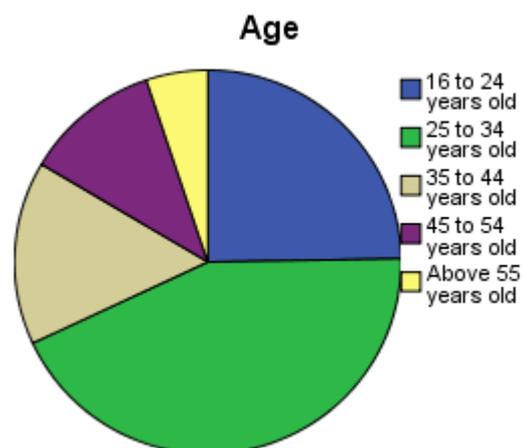
There were 97 respondents who participated in this survey, the table and graphs below show the respondents' background information. It includes their gender, age, education background and income level, which were gathered through the questions in section 3 of the questionnaire.

Fig. 5.1 Respondents Profiles

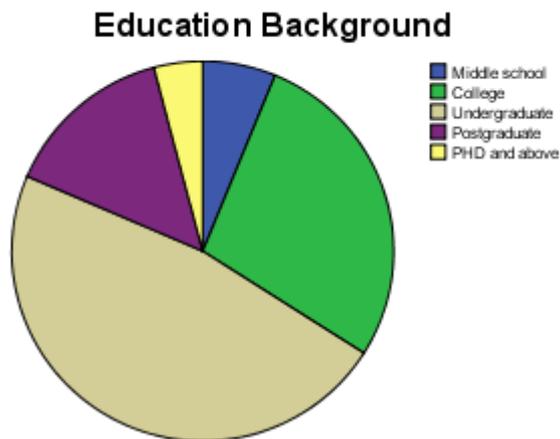
Gender	Frequency	Percent
male	39	40.2
female	58	59.8
Total	97	100.0



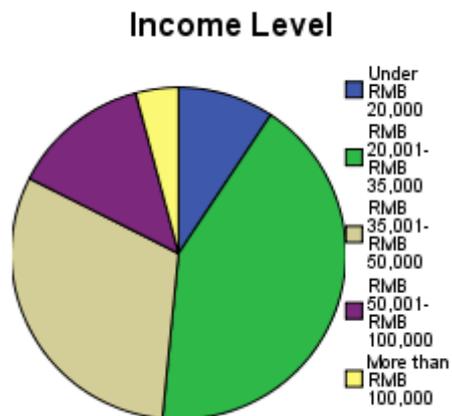
Age	Frequency	Percent
16 to 24	24	24.7
25 to 34	42	43.3
35 to 44	15	15.5
45 to 54	11	11.3
Above 55	5	5.2
Total	97	100.0



Education Background	Frequency	Percent
Middle school	6	6.2
College	27	27.8
Undergraduate	46	47.4
Postgraduate	14	14.4
PHD and above	4	4.1
Total	97	100.0



Income Level (In RMB)	Frequency	Percent
Under 20,000	9	9.3
20,001- 35,000	41	42.3
35,001- 50,000	30	30.9
50,001- 100,000	13	13.4
More than 100,000	4	4.1
Total	97	100.0



As Fig. 5.1 shows, following the non-probability sampling methods, the majority of the respondents are from the young generation, which may have caused uneven distribution of demographic variables. However, it should be noted that the young generations are the most activity consumer group in laptop market. They are more willing to absorb new information. The laptop market is featured with rapid technology development, young generation are more likely to recognize such changes. Therefore, opinions from this consumer group are more likely to reflect an accurate image of laptop market in China. A high percentage of the respondents are those received higher education and with income level over 20,000 RMB, who are more likely to purchase laptop for different purposes. Therefore, the sample employed in this research, despite uneven distribution, it should provide valuable information to reach a reliable conclusion.

5.1.2 Hypotheses Testing

Each statement in the questionnaire is designed to test one feature of a laptop, with continues rating scale of seven categorises. The underlying assumption of equal variance and homogeneity of variance were also met, which enhance the reliability of validity of parametric statistics. With a total 97 respondents participated in the study, the result should be able to provide reliable insights of COO effects in Chinese laptop market. For full set SPSS data outputs please see *Appendix 3*, which include the output for Paired-Samples T-Test, Independent T-Test, and one way ANOVA tests.

5.1.3 COO Effects in Overall Product Evaluation

In testing *H1*, *Holding other information cues have equal effect on consumers' perception. Chinese consumers' general perception on foreign made laptops and domestic made laptops are significantly different.* Paired-samples t-test was conducted, as it can be used for testing the responses to two different questions that provided by the same person and tell the researcher whether there is statistically significant difference in the mean score for two perceptions (Pallant, 2007). In this research, same respondents were asked to provide their perception towards both types of laptops, and the answers were rated in the same scale. The data output of the test was summarized below:

Fig. 5.2 General Perception Paired-Samples T-Test Result

Paired samples	Chinese brand and Chinese made products		Foreign brand and foreign made products		T-value	Df	Sig. (2-tailed)
	Mean	Std. Deviation	Mean	Std. Deviation			
General Perception	3.71	1.020	5.16	.932	-9.371	96	.000

In calculating the magnitude of the COO effect in determinate consumers' perceptions, the Eta squared was obtained with the formula:

$$\text{Eta squared} = \frac{t^2}{t^2 + N - 1} \quad (\text{Pallant, 2007})$$

$$\text{Eta squared} = 0.477$$

The result shows a statistically significant difference between Chinese consumers' general perception towards Chinese made laptop (M=3.71, SD=1.020) and foreign made laptop (M=5.16, SD=0.932), $t(96) = -9.371$, $p < 0.05$. The eta squared statistic (.477), which indicated a large effect size¹. Therefore, the result support *H1*, Chinese consumers' general perception toward foreign made laptops and domestic made laptops are significantly different. The result is consistent with Bikley and Nes (1982) finding of consumers in less developed country prefer products that made in more developed countries. It also consistent with Al-Sulaiti and Baker (1998) finding of Chinese COO label have a adverse effect on Chinese consumers' perception.

5.1.4 COO Effects in Product Cues Evaluation

In testing *H2*, *Chinese consumers' evaluation on product cues for foreign brand laptops and domestic brand laptops are significantly different*. Paired-samples t-test was conducted again. Nineteen different product cues were tested, as that shown in the questionnaire from question 1 to question 19. The result of the paired-samples t-test shows among the nineteen product cues, consumers' perception towards 5 cues, product functionality, safety, season pricing, sales force and publicity have no significant difference. Statistically significances were found in the perceptions towards the other fourteen product cues. (Detailed output on the testing of product cues result is shown in *Appendix 3*)

Chinese consumers evaluate foreign product are generally better on the “*product*” aspect, with higher rating given on product quality, appearance, technology advance, workmanship, durability and product reputation for foreign made laptop. In the perception of “*price*” aspect, Chinese made laptops are more preferred than foreign laptops. Consumers consider Chinese made laptops are more price competitive and better value for money. Chinese laptops were also given high evaluation on the “*place*” aspects related cues. Chinese firms are believed of having advantage in product distributions and can provide better after sale service, and consumers feel they have better access to Chinese made laptop than foreign made laptop. In the evaluation of “*promotion*” aspect related cues, the result has not found significant difference between consumers' perception in sale force and publicity, except for

¹ Pallant (2007) suggest 0.01=small effect, 0.06=moderate effect, 0.14=large effect

foreign laptops were rated higher for advertising. Therefore, with over 70% of the tested product cues were perceived differently by Chinese consumers, the result support hypothesis 2, Chinese consumers' perceptions on product cues for foreign brand laptops and domestic brand laptops are significantly different. The result support Hong and Wyer (1989) argument on COO can have impact on the interpretation of other product cues, and also consistent with the "Halo" hypothesis of COO effects, which argue COO affect consumers' beliefs in product attributes.

The higher rating on product aspect cues for foreign product was not surprising. As most of the foreign companies have been founded and compete in the high-tech market for a long time. They have more upstream resource allow them to be more efficient in operation and more devoted in R&D projects. Consequently, they are able to build good reputations with quality products. In contrast, the Chinese economy only open to the world since the 1980s, companies in computer industry are much less developed compare to their international competitors. However, Chinese companies marketing their products in a much smaller scale, and many Chinese brand laptop are only available in the Chinese market. Therefore, Chinese companies are more flexible in react to market demand. When they realize they cannot compete on the product itself, they take the advantage of being local and provide better service, also offer more attractive price.

5.1.5 COO Effects and Demographic Factors

Gender Difference and COO Effects

The third set of hypotheses is related with analysing whether COO effects are associated with respondents' demographic variables. In testing *H3 (a)*, the perception difference between gender groups, as it can only be divided into male and female two groups, independent t-test was conducted. As in Fig. 5.3, the data output shows the **Sig.** value is larger than 0.05, hence support the assumption of equal variance. Consequently, the **Sig. (2-tailed)** value in the first line is chosen. The overall result of the independent-samples t-test shows no statistically significant difference in consumers' perception towards either Chinese made laptop or foreign made laptop between male and female respondents. For perception towards domestic made laptops, male group $M= 3.69$, $SD=1.055$ and female group $M= 3.72$, $SD=1.005$, and $t(95) = -0.150$, **Sig. (2-tailed) =0.881 > 0.05**. For perception towards foreign made laptops,

male group $M=5.18$, $SD=0.914$, female group $M=5.16$, $SD=0.951$, and $t(95) = 0.125$, **Sig. (2-tailed) = 0.901 > 0.05**. Therefore, the result does not support hypothesis $H3(a)$. Although some researchers claim gender difference may influence the level of COO effects in product evaluation. However, the effects is highly subjected to product categories (Eroglu and Machleit, 1989), and previous study have also found no correlation between gender difference and COO effects, such as Dornoff et al. (1974) in Bikley and Nes (1982).

Fig. 5.3 Independent T-test of Gender Difference and COO Effects Result

		Mean	Std. Deviation	Sig. (2-tailed)
Chinese made Laptops	Male	3.69	1.055	0.881
	Female	3.72	1.005	0.882
Foreign made Laptops Male	Male	5.18	0.914	0.901
	Female	5.16	0.951	0.900

In testing $H3(b)$, $H3(c)$ and $H3(d)$, whether the level of COO effects is associated with consumers' age, education background and income level, one-way analysis of variance (ANOVA) between groups were conducted respectively, because respondents were divided into more than two groups by these three demographic variables.

Age Difference and COO Effects

The result from one-way ANOVA shows no statistically significant difference among different age groups in evaluating either Chinese or foreign made laptops, the simplified data output is shown in Fig. 5.4. The **Sig.** value for Levene's test was greater than 0.05 for both type laptops; it has not violated the assumption of homogeneity of variance. The **Sig.** value under ANOVA table is **0.389 > 0.05** for domestic made laptop and **0.589 > 0.05** for foreign made laptop. Therefore, the result shows no statistically significant difference among different age groups and does not support $H3(b)$, the level of COO effects is not associated with consumers' age.

Fig. 5.4 ANOVA Test on Age Difference and COO Effects Result

		Sum of Squares	df	Mean Square	F	Sig.
Chinese Made Laptop	Between Groups	3.457	4	.864	1.044	.389
	Within Groups	76.172	92	.828		
	Total	79.629	96			
Foreign Made Laptop	Between Groups	2.535	4	.634	.707	.589
	Within Groups	82.455	92	.896		
	Total	84.990	96			

Education Background Difference and COO Effects

H3 (c) is to examine whether the level of COO effects is associated with consumers’ education background. Respondents were divided into five different groups, and the result from the test reveals that consumers in different groups tend to have different perception towards both Chinese made laptop and foreign made laptop. The simplified result is shown in Fig. 5.5. The **Sig.** value for Chinese made laptop is **0.000<0.05**, but for foreign made laptop is **0.036<0.05**. Therefore, the result support *H3 (c)*, the level of COO effects is associated with consumers’ education background. The size of effects is calculated with the formula:

$$\text{Eta squared} = \frac{\text{Sum of square between groups}}{\text{Total sum of squares}}$$

The calculated result of eta squared for Chinese made laptop is **0.2068>0.14**, which is considered as a large effects. However, as the means plot graph suggest the actual difference between each continuum groups are relative small with around 0.5 rating difference observed. But the difference between the oldest and the youngest group were quite significant. The calculated eta squared result for foreign made laptop is **0.1047>0.06**, which is considered as a medium effects. The means plot (Appendix 3) suggest an almost liner relationship between education background and consumers’

perception. As education background increase, the rating on foreign product will increase, but the rating on Chinese made laptop decreases. The result is consistent with Wang (1978) in Bikley and Nes (1982), who found better educated people are likely to rate foreign products more highly than those with limited education background.

Fig. 5.5 ANOVA Test on Education Background Difference and COO Effects
Result

		Sum of Squares	df	Mean Square	F	Sig.
Chinese Made Laptop	Between Groups	20.673	4	5.168	6.000	.000
	Within Groups	79.245	92	.861		
	Total	99.918	96			
Foreign Made Laptop	Between Groups	8.736	4	2.184	2.692	.036
	Within Groups	74.625	92	.811		
	Total	20.673	4	5.168	6.000	.000

Income Level Difference and COO Effects

In testing *H3 (d)*, whether the level of COO effects is associated with consumers' income level, similar result was found as that in *H3 (c)*, as shown in Fig. 5.6. With the Sig. value for Levene Statistic greater than 0.05, since not violated the homogeneity of variance assumption. The **Sig.** values under ANOVA table were sought, the **Sig.** value for Chinese made laptop was **0.015<0.05**, and for foreign laptop was **0.05**. Both values are smaller than 0.05, which demonstrate the level of COO effects is associated with income level. Therefore, the result supports *H3 (d)*. The means plot shows similar pattern as that test for education difference. With income increase, the perceptions toward foreign made laptop increase, but decrease for perceptions toward Chinese made laptop. The sizes of the effects were obtained through the Eta squared. For Chinese made laptop, the Eta squared value is **0.1242**, which is a medium effect.

For foreign made laptop, the Eta squared value is **0.1463**, which is a large effect.

Fig. 5.6 ANOVA Test on Income Level Difference and COO Effects Result

		Sum of Squares	df	Mean Square	F	Sig.
Chinese Made Laptop	Between Groups	12.413	4	3.103	3.263	.015
	Within Groups	87.505	92	.951		
	Total	99.918	96			
Foreign Made Laptop	Between Groups	12.203	4	3.051	3.944	.005
	Within Groups	71.158	92	.773		
	Total	83.361	96			

The similar result from *H3 (c)* and *H3 (d)* is expected, as it is reasonable to assume people with higher education are more likely to have higher income. The result also consistent with Hoffmann (2000), who finds COO effects is associate with people's income level.

5.1.6 COO Effects in Purchasing Decision Process

The fourth hypothesis is to test how COO may affect consumers' purchasing decision. Paired-samples t-test was conduct to examine consumers' purchasing decisions difference towards Chinese made and foreign made laptop, Fig 5.7 shows the simplified analysis result. The result from the data output can be shown below:

Fig. 5.7 Purchasing Decision Paired-samples t-test Result

Paired samples	Chinese brand and Chinese made products		Foreign brand and foreign made products		T-value	Df	Sig. (2-tailed)
	Mean	Std. Deviation	Mean	Std. Deviation			
Purchasing Decison Preference	3.98	1.155	4.29	1.274	-1.052	96	0.136

As Fig. 5.7 shows, The **Sig. (2-tailed)** value is **0.136**>**0.05**, which means there is no significant difference in consumers' purchasing decision towards either Chinese made or foreign made laptop. The result demonstrates that the COO effects become insignificant at real purchasing decision, when consumers have access to multi-cue information. Therefore, the result support *H4*, there is no significant difference between consumers' purchasing decisions towards Chinese made laptop and foreign made laptop. The result is consistent with many of the recent COO related studies, which employed multi-cue approach in conducting their research (e.g. Peterson and Jolibert, 1995; Agrawal and Kamakura, 1999).

5.2 Qualitative Research Result

5.2.1 Respondents Profiles

8 respondents were participated in the interviews, the respondents' profile and personal preference are summarised in the table below.

Fig. 5.8 Respondents Profiles and Preferences

Respondents (Sex)	Age	Occupation	Income (RMB)	General Perception Preference	Purchasing Preference
R 1 (F)	27	Teacher	30,000	Domestic Brand	Domestic Brand
R 2 (M)	28	Entrepreneur	60,000	Domestic Brand	Domestic Brand
R 3 (M)	32	Engineer	60,000	Foreign Brand	Foreign Brand
R 4 (F)	38	Business Women	100,000	Foreign Brand	Foreign Brand
R 5 (F)	45	Government Official	70,000	Foreign Brand	N/A
R 6 (M)	24	University Student	N/A	Foreign Brand	Domestic Brand
R 7 (F)	30	Retailer	60,000	Domestic Brand	Domestic Brand
R 8 (F)	36	Company Manager	90,000	Foreign Brand	Foreign Brand

As Fig. 5.8 shows, the average age of the eight respondents' age vary from 24-45, and give the average age of 32.5. Base on the table, the average income is 58750 Yuan/Year. Among the 8 respondents, five of them showed preference to foreign made laptop, which account for 62.5%. The other 3 respondents stated that they prefer Chinese made laptop, which account for less than 40% of all. However, when respondents were asked to indicate their purchasing preferences, the preferences towards foreign made products were significantly decreased. 4 respondents indicated that they would prefer to purchase Chinese made laptop, and one respondent did not give clear indication of his preference, which leave only three respondents showed preference of purchasing foreign made laptop. This result confirms the finding from

the quantitative research. COO effects become insignificant when consumer move from evaluation process to decision making process.

5.2.2 Interview Results and Analysis

The interview questions were divided under four different themes, in order to achieve the desired objectives. To some extent, the result of the interview is considered as a complementary result for the quantitative research. As the qualitative research can provide the information of what are the motivation and the reasons for consumers' preferences. Besides, the physiological factors were taken account into the interview that cannot be accurately tested by quantitative research.

Objective One: To exam the significance of COO effects in consumers' perceptions.

The first three questions are designed to explore the significance of COO effects in consumers' perception towards Chinese made and foreign made laptop. Respondents were asked whether they consider COO is an important factor in laptop evaluation; what are their perceptions toward these two type products, and what do they think are the main difference between Chinese made and foreign made products.

Among the 8 respondents, 6 of them gave straight answers claim they believe COO is important information to be considered in product evaluation, as it signifies a number features of products. However, respondents 8 and respondent 7 justify the view taking into account the "country of assembly" issue. Respondent 8 stated: *"although the made in country are unlikely to be the brand origin country nowadays, but most of the foreign brand computers are still have better quality or exclusive design, such as MacBook or MacBook Air, that Chinese made laptop cannot compete with"*. Respondent 7 hold a total opposite view and said *"COO does not matter, most of the foreign brand laptop in Chinese market are made in Taiwan; they are not much different from domestic brand laptops"*.

In answering what are the main difference they consider between Chinese made and foreign made laptop. Most respondent believe foreign made laptop have superior quality than Chinese brands, but also more expensive. Respondent 3 explained his

view by saying *“normally speaking, foreign brand is made up with imported hardware, and companies such as Dell, before they release a product in the market, they might run 20 tests on a laptop, but Chinese made laptop will run no more than 10 tests”*. Respondent 6, a university student describe the situation with very strong expression and said *“Chinese made laptops are too cheap that make people concern the quality of them, and among all the Chinese brand, except Lenovo, all the rest are rubbish, will not last more than a year”*. However, respondent 7 shows opposite opinion and said *“I don’t think there are much difference between them, most of my friends are using Chinese made laptops, I think they are not bad, foreign made ones sometimes getting too complicated for me, and require extra care”*. Respondent 7 also said that *“I think Chinese made laptop are better, the price is acceptable by most people. It is not like something that you can use for the whole life, after one or two years, people might will need to buy another one anyway, it really not worth well to invest too much money in one purchase”*.

The above result shows Chinese consumers’ generally perceive foreign made laptop have better quality, particular the ones with better computer related knowledge. They are able to appreciate the reason why foreign made laptops are better quality and more expensive. However, price still has dominated effects for some consumers. In the case of respondent 7, the COO effects can be explained with stereotype. People in her social group shows preference to Chinese made laptop, which made her over emphasis such popularity and build her own perception.

Objective Two: To identify what product cues are associated with COO effects in consumers’ perception towards laptops with different COO label.

To achieve objective two, respondents were asked what they think the COO label represent, and what product cues that they normally associated with COO label in evaluating product. Quality was once again addressed by the respondents, as respondent 4 states: *“you can tell a product’s quality, Prestige value from the COO label, if I buy a IBM, I would knew that the quality can be guaranteed, it is unlikely to cause me too many problems, for Chinese made laptops, I am not too sure you can get this kind guarantees”*. Respondent 3 address the question from the design

aspect and suggest *“most of the Chinese firms, particularly the small ones just copy the design from big reputable companies, they do not really have their own designs, and I think foreign laptops are generally have advantages in workmanship, and better functioned”*. Respondent 6 states *“when I think of Chinese made laptop, the first thing that comes into my mind is the cheap price, but I really doubt about the quality. After a short period, the performance will just drop dramatically, and become really slow. They are not so stable either, and easy to get physical damage”*. Respondent 2 considered the after sale services and said: *“both Chinese and foreign companies can provide good after sale service, but it is much easier to find a after sale service centre for Chinese brand, but not so much for foreign brands. Unlike desktop PCs, you can fix it by yourself or find some people in the market, to fix laptop you have to find people with expertises”*.

The result from objective reveals that Chinese consumers’ have better perception towards foreign made laptops when considering the *“product”* aspect of the brand. This result is consistent with the result from the quantitative research. Furthermore, the interview also uncovered the reasons why consumers’ perceive Chinese brand have better after sale service is mainly due to the quantity rather than the quality of the service. As respondent 3 perceive the after sale service from Dell as *“golden service”*.

Objective 3: To examine the significance of COO effects in purchasing decisions

To achieve objective 3, respondents were asked whether they would consider products’ COO label at a purchasing situation and would they choose to buy a foreign made laptop or a Chinese made laptop.

Respondent 1 state that *“I would buy a Chinese made laptop, Lenovo would be my first choice, because I do not know too much about computers, if anything goes wrong, I don’t know what to do, so after sale service is very important. Besides, many Chinese firms nowadays provide software update services, save me lots time and money to find them”*. Respondent 6 said: *“I do not have much money, even though I think Chinese made laptops are poor in quality, I still would buy a Chinese made one”*. Respondent 2 said *“it doesn’t matter, Chinese made or foreign*

made, as long as it has good quality and service, then I will choose one with acceptable price". Respondent 8 with yearly income around 90,000 Yuan, again stress the quality issue, and said: *"foreign laptops have better quality, unlikely to get damaged easily, I have a PC in my office for work, and I use laptop are mostly to store pictures and files at home, I don't want to loss all my valuable stuff, because the computer is crashed"*.

The result shows that COO effects become relative significant in consumers' purchasing decisions, when respondent has high income, since price is not their concern, but quality is more desirable. But for respondents with low income, price would be their primary consideration. Given the current purchasing power of majority Chinese consumers, price would have significant effect for consumers' purchasing decision. The price war among firms in today's market demonstrates the importance of price reduction in pushing the sales.

Objective 4: To examine the physiological factors that other than product cues associated with COO effects

To achieve objective 4, respondents were asked about their purchasing decision, when assuming COO is the only difference between two group products. The primary purpose of the question is to find out the level of consumer ethnocentrism in the laptop market. However, the result has also unexpectedly showed consumers consider COO from self esteem, identity or recognition.

Four respondents were not too sure about this question, and could not give any particular answer for their answer. Respondent 2 and respondent 7 mentioned the notion of *"Support Domestic Product"* in their answers. Respondent 4 and respondent 8 gave their answer from a different perspective. Respondent 4 said, *"I think my laptop more than just a computer, it represent my taste, my style, and for this reason I certainty would choose a foreign well recognized brand"*. Respondent 8 also answer the question with *"quite often I need to take my laptop to some business meeting or conference, a reputable laptop not only represents me, it also represents my company"*.

The result demonstrates that although consumer ethnocentrism was not significant in this study, but it does exist among consumers. The insignificant result might be caused by the product category, as respondent 2 states: ***“the domestic laptops are not really domestic made, they might be made in some other countries, and the key components may be imported”***. Thus, it would be reasonable to expect a higher result of consumer ethnocentrism in some other sectors. The result also demonstrates the power of the brand reputation. In the case of respondent 4 and respondent 8, the reason for their choice is purely based on the product reputation. The result supports Obermiller and Spangenberg’s (1989) information process framework in explain COO effects on product evaluations and consistent with Verlegh and Steenkamp’s (1999) view of COO acts as an *“expressive”* or *“image”* attribute, which links the product to symbolic and emotional benefits, including social status and national pride.

Chapter 6 Conclusion and Recommendations

6.1 Conclusion

This dissertation seeks to find out the significance of COO effects in Chinese laptop market, how product COO may affect consumers' perception and their purchasing decisions. A number of previous studies were reviewed, which have provided valuable information to help understand COO related concepts and theories. Base on these studies, 4 sets hypotheses were constructed. To answer the research question and test the hypotheses, questionnaire and interviews were conducted as quantitative and quantitative research.

The result shows that Chinese consumers generally perceive foreign made laptops are better than Chinese made laptops. This result supports many of the previous studies, such as Bilkey and Nes (1982), Johansson et al (1985). The result from interview also supports this finding, and justifies the result with "country of assembly" issue. Result from *H2* shows that COO also has significant impact on the interpretation of other product cues. Consumers generally evaluate foreign made laptops are better in "product" aspect cues, such as quality, design, workmanship, etc. However, Chinese laptops are more preferred when focusing on the "price" aspect, as they are much cheaper in price, which compensate the quality disadvantages. According to the result from the quantitative analysis, Chinese consumers also perceive Chinese laptop firms provide better after sales service than foreign brand. The interview provided more detailed result, and suggests the result of high rating on after sale services for Chinese firms from the questionnaire is mainly caused by the availability of service centres, rather than the quality of the service.

The result of testing *H3* shows that the level of COO effects in Chinese laptop market is associated with consumers' education background and income level. As respondents' education background or income level increase, their evaluation towards foreign made laptop will become higher, but the perception towards Chinese made laptop will decrease. However, no statistically significant differences on the level of COO effects were found between gender groups and different age groups.

Hypothesis 4 is to examine the significance of COO effects in consumer's purchasing decisions. The quantitative research result was consisted with many of the previous studies that have used multi-cue approach. The COO effects become insignificant when consumers can obtain other product information at a real purchasing situation. The interview further analysis the result and shows that, when a consumer has little concern in product price, COO effects are relative bigger in his/her purchasing decision, because of the superior quality or design that associated with foreign brand. The interviews also examine the existence of physiological factor in consumers' purchasing decision process and find consumers may link the product with their personal social statuses and national pride.

6.2 Managerial Implication

The finding of this dissertation largely support previous COO studies that consumers use COO or brand for product quality assessment. It can help firms to gain better understanding of Chinese consumers and help them to develop effective strategies.

6.2.1 Foreign Companies Strategies

Highlight COO image and Avoid Direct Competition

For foreign firms, especially those with solid reputation and positive COO image, they should highlight the product COO in their promotion programmes, as it signifies the superior quality as their selling point. One the other hand, to enhance the quality and protect the brand reputation, it is unlikely for foreign firms to directly compete with Chinese firms on price. Therefore they should avoid to be engaged in direct price war. More importantly, they should make most consumers aware of in what aspects their products are better than Chinese domestic laptops. For example, inform consumers with the materials being used are better-quality; the great number of test been ran that has enhanced the stability, rather than simply tell consumers that the quality is good. With detailed information provided, it will increase consumers' confidence in the product, and reduce the adverse effect of high price, since consumers understand the reasons for high price. Therefore, consumer would have better evaluation in the product's value for money. As Porter's five forces model suggest one way to increase the competitiveness is to increase the barrier to entry.

With the advantages in brand identity, economies of scales and proprietary learning curve, foreign firms are more likely to achieve high competitiveness. Furthermore, given the fact that most foreign companies have multiple production lines, they should try to fully utilise the umbrella brand effects in marketing their product.

Direct Consumer Taste and Develop E-Marketing

Most of the foreign brands in Chinese laptop market have good reputation, rich upstream resources, and have adequate experience in competing in the laptop market. With these advantages, they should have the ability in leading the market. Considering the potential of the Chinese laptop market, the percentage of people own a laptop is still low. Quite often, people are not clear with what is the best product for them. Therefore, rather than following the demand of the market, foreign firms with advantage in operation, marketing, and the ability in innovative design, they should try to lead the market by telling the consumers what they want and what to buy. To achieve the goal, foreign firms should effectively adopt market segmentation, and provide the market with customised product. In their promotion programme, they should establish the market trend. Therefore, take the first-mover advantage. With the absolute advantage in R&D abilities; it would be difficult for the domestic firms to catch up. In the long run, the “*Matthew Effect*” would become significant and threat the survival of small Chinese firms.

Foreign firms should also take initial steps in developing E-marketing strategies. E-marketing is not a new concept in the western countries, but the under-developed financial systems in China have restrained the development of E-marketing in general. However, in recent years, more and more people are using credit cards, and with the development of Internet, on-line shopping is becoming increasingly popular. Foreign firms with positive COO image to guarantee the quality, their products are more trustable by consumers. Therefore, ease the concern for needing to see the actual product before purchasing.

6.2.2 Chinese Firm Strategies

Take the Advantage of Being Local

Foreign MNCs have advantages in international marketing, but local firms have its own advantages of better knowledge in the local market, which is difficult for foreign firms to duplicate (Rarick, 2004). Chinese laptop market is formed with a large portion of low-end consumers; local firms with creative operation skills are more likely to cut the cost in the Chinese economy. Therefore, with disadvantage in quality, local firms should take the full advantage in cost reduction. As the result of the research suggest, Chinese firms have already established themselves as price attractive in consumers' mind. Thus, in competing on price, they are more likely to success. In addition, the interview result shows the reason why Chinese firms are evaluated better in after sale service is because the number and availability of services centre. Therefore, Chinese firms should further develop the distribution channel. With their current developed distribution channels, it can be really expensive for foreign firms to compete on the channel of distribution.

Being local firm, Chinese firms are also better in understanding consumers' needs and the culture. Capitalizing on local tastes and preferences is a strong competitive advantage that Chinese firms have. Chinese firms with small marketing scale, they can more focus on the Chinese market. Therefore, Chinese firms should develop effective strategies in product design; inject social culture into customising product development.

Take the Advantage of Being Chinese

Even though, the study have not found significant result in consumers' sense of nationalism, but it should not under estimate the power of consumer ethnocentrism in directing their purchasing behaviours. Especially after the huge success of the 2008 Beijing Olympic, the senses of national pride have become extremely high. Therefore, Chinese domestic firms should emphasis the brand origin of being "Chinese" in promoting their products over that of foreign brands. Besides, the Chinese government have shown great determination and effort to promote Chinese firms in competing in the high-tech market. Lenovo's acquisition of IBM was greatly supported by the government. Therefore, in the future, it is expected to see to

government to provide more fund, resources and favourable policies in supporting companies in computer industry.

6.3 Recommendation for future study

It should be recognized that the data employed in this research is mainly from well developed urban areas. This may suitable and necessary for this study, but it can limit the validity in generalise the result in the entire country. Future study could be conducted to test the COO effects in less developed areas and small cities, which could be the future market for laptop consumption. Therefore, explore the potentiality that Chinese market can offer.

Reference

Agrawal, J. and Kamakura, W. (1999). "Country of origin: A competitive advantage?" *International Journal of Research*. Vol. 16. pp. 255–267.

Ahmed, Z. Johnson, J. Yang, X. Fatt, C. Teng, H and Boon, L. (2004). "Does Country of Origin matter for Low-involvement Products?" *International Marketing Review*. Vol. 21 (1) pp.102-120.

Al-Sulaiti, K. I. and Baker, M. (1998) "Country of origin effects: a literature review", *Marketing Intelligence & Planning*, Vol. 16 (3), pp. 150.

Baker, J. M. (2000). "Marketing Theory: A Student Text". Thomson. United Kingdom.

Bilkey, W. J. and Nes, E. (1982). Country-of-origin effects on product evaluations *Journal of International Business Studies*, Vol. 13 (1), pp. 89-99.

Bruning, E. (1997) "Country of origin, national loyalty and product choice, the case of international air travel". *International Marketing Review*, Vol. 14 (1), pp. 59-74.

Burns, S. (2007). "China Sees Surge in Notebook Shipments" Incisive Media Ltd. London. [Online] available at: <http://www.activehome.co.uk/vnunet/news/2190602/china-notebook-pc-shipments> accessed as at 08/07/10

Business Weekly. (2003). "Samsung Plugs into China's Laptop Market" [Online] available at: http://english.peopledaily.com.cn/200311/14/eng20031114_128276.shtml accessed as at 08/07/10

CCID. (2008). "China's Growing Notebook PC Market Sparks Intense Competition in Differentiation and Price, says CCID Consulting" [Online] available at: <http://computers.tekrati.com/research/9846/> accessed as at 08/07/10

CCID. (2003). "Laptop Market Research Report" *Business Opportunities* Vol. 80 [Online] available at: <http://media.ccidnet.com/media/ciw/1261/e1501.htm> accessed as at 10/07/10

Chao, P. (1993), "Partitioning country of origin effects: consumer evaluations of a hybrid product," *Journal of International Business Studies*, Vol. 24 (2), pp. 291-306.

Chao, P. (1998), "Impact of Country-of-Origin Dimensions on Product Quality and Design Quality Perceptions," *Journal of Business Research*, Vol. 42 (1) pp. 1–6.

Cowton, J. C. (1998). "The Use of Secondary Data in Business Ethics Research". *Journal of Business Ethics*. Vol. 17 pp. 423-434.

Cooper, R. D. and Schindler, S. P. (2006). "Business Research method" 9th Edition. McGraw Hill. London

Eroglu, S. A and Machleit, K. A. (1989). "Effects of individual and product specific variables on utilizing country of origin as a product quality cue". *International Marketing Review*, Vol. 6(6), pp. 27–41.

Fung, C. K and Iizaka, H. (2002) 'Foreign Direct Investment in China: Policy, Trend and Impact'. *China's Economy in the 21st Century*. Hong Kong

Han, C. M. (1989). "Country Image: Halo or Summary Construct?". *Journal of Marketing Research*, Vol. 26, pp.222-29.

Han, C. M. and Terpstra, V. (1988). "Country-Of-Origin Effects For Uni-National And Bi-National". *Journal of International Business Studies*, Vol. 19 (2), pp. 235

Hancock, B. (1998). "Trent Focus for Research and Development in Primary Health Care: An Introduction to Qualitative Research". Trent Focus Group.

Hofstede, G. (1980). "Motivation, leadership and organization: do American theories apply abroad?" *Organizational Dynamics*, Vol. 9 No. 1, pp. 42-60.

Hoffmann, R. (2000). "Country of origin – a consumer perception perspective of fresh meat". *British Food Journal*, Vol. 102 (3), pp.211-29.

Huang, S. Y. (2003). "Selling China: Foreign Direct Investment During the Reform Era". Cambridge University Press.

Hugstad, P.S. and Durr, M. (1986), "A study of country of manufacturer impact on consumer perceptions," in Malhotra, N. and Hawes, J. (Eds), *Developments in Marketing Science*, Vol. 9, *Academy of Marketing Science*, Coral Gables, FL, pp. 115-19.

Hui, K. M. and Zhou, L. (2003). "Country-of-Manufacture Effects for Known Brands". *European Journal of Marketing*. Vol. 37(1/2)

Hong, S. and Wyer, R. S. (1989). "Effects of Country-of-Origin and Product-Attribute Information on Product Evaluation: An Information Processing Perspective". *Journal of Consumer Research*, Vol. 16, pp.175-87.

Janda, S. and Rao, C. P. (1997). "The effect of Country-of-Origin Related Stereotypes and Personal Beliefs on Product Evaluation". *Psychology & Marketing*, Vol. 14 (7), pp. 689-702.

Johansson, J. K., Douglas, S. P. and Nonaka, I. (1985). "Assessing the Impact of Country of Origin on Product Evaluations: A New Methodological Perspective." *Journal of Marketing Research*, Vol. 22, pp. 388-96.

Kraemer, L. K. and Dedrick, J. (2002). "Enter the Dragon: China's Computer Industry" IEEE. February

Kwok, S., Uncles, M. and Huang, Y. (2006). "Brand preferences and brand choices among urban Chinese consumers, an investigation of country-of-origin effects". *Asia Pacific Journal of Marketing and Logistics*, Vol. 18 (3), pp. 163-72.

Liebeskind, J and Rumelt, R. (1989). "Market for Experience Goods with Performance Uncertainty". *RAND Journal of Economics*. Vol. 20 (4).

Lin, Y. J. Cai, F. and Li, Z. (2003). "The China Miracle, Development Strategy and Economic Reform". Revised Edition. The Chinese University Press.

Madden, N. (2003). "Brand origin not major factor for most Asians". *Advertising Age*. Vol. 74 (14), p33-33, 1/4p

Malhotra, Naresh K. (2007). *Marketing Research: An applied Orientation*, 5th Edition, Pearson education, New Jersey

McDaniel, C and Gates, R. (2002) "Marketing Research, the Impact of Internet". 5th Edition. John Wiley & Sons, Inc. United State of America.

Morrison, M. Y. (2006). "China's Economic Condition". CRS Issue Brief for Congress. Congressional Research Service ~ The Library of Congress.

National Bureau Statistics of China. (2007). "China Statistical Yearbook 2007". National Bureau of Statistics Press.

Obermiller, C. and Spangenberg, E. (1989). "Exploring the Effects of Country of Origin Labels: An Information Processing Framework". *Advances in Consumer Research*. Vol.16 pp. 454-459.

OECD (2002) 'Foreign Direct Investment for Development' *Committee on International Investment and Multinational Enterprises* pp: 1-32

Olsen, J.E., Granzin, K.L. and Biswas, A. (1993), "Influencing consumers' selection of domestic versus imported products: implications for marketing based on a model of helping behaviour," *Journal of the Academy of Marketing Science*, Vol. 21 (4), pp. 307-321.

Peterson, R. A. and Jolibert, A. JP. (1995). "A Meta-Analysis of Country-of-Origin Effects". *Journal of International Business Studies*, Vol. 26 (4), pp. 883-900.

PHYSORG (2005) "Strong Laptop Growth Seen in China" PHYSORG, 5th Aug. [Online] available at: <http://www.physorg.com/news5645.html> Accessed as at 12/07/10

Rarick, C. A. (2004). "The Competitive Advantage of Local Firms in Developing Economies: The Case of Bajaj of India. [Online] available at SSRN: <http://ssrn.com/abstract=1118544>

Rawwas, M. Y. A., Rajendran, K. N. and Wuehrer, G. A., (1996). "The influence of worldmindedness and nationalism on consumer evaluation of domestic and foreign products". *International Marketing Review*, Vol. 13 (2), pp. 20-38.

Roth, M.S. and Romeo, J.B. (1992) "Matching Product Category and Country Image Perceptions: A Framework for Managing Country-of-Origin Effects". *Journal of International Business Studies*, Vol. 23 (3), pp. 477-97.

Samiee, S. (1994). Customer evaluation of products in a global market. *Journal of International Business Studies*, Vol. 25 (3), pp. 579-604.

Shimp, T. A. and Sharma, S. (1987). "Consumer ethnocentrism: Construction and validation of the CETSCALE". *Journal of Marketing Research*, Vol.24, pp.280-289.

Tian, X. W (2007) 'Managing international business in China' New York; Cambridge: Cambridge University Press,

UNCTAD. (2007). "Rising FDI into China, the Fact Behind the Numbers". UNCTAD Investment Brief. NO. 2.

Verlegh, P. W. J. and Steenkamp, J. E. M. (1999). "A review and meta-analysis of country-of-origin research". *Journal of Economic Psychology*, Vol. 20, pp. 521-46.

Wang, C. K. and Lamb, C. W. Jr, (1983). "The impact of selected environmental forces upon consumers' willingness to buy foreign products". *Academic Journal of Marketing Science*, Vol. 11 (1/2), pp.71.

Zhu. B. R. (2004) "China's laptop PC market remains attractive". *China Daily* 08/03/04.

Appendices

Appendix 1: Full Set of Interview Questions

Questions:

Theme One: COO Effects in Laptop Perception

1. Would you consider COO is an important factor in evaluating a laptop?
2. What is your general perception on Chinese domestic laptop computers (e.g. Lenovo, Hair and etc) and foreign brand laptop computers (e.g. Dell, SONY and etc) respectively?
3. What do you think is the main difference between Chinese domestic brand products and foreign brand products?

Theme Two: COO Effects in Product Cues Evaluation

4. What do you think a product's COO represent about the product?
5. When you evaluating a laptop, do you think COO label affect your perception towards other product cues? Such as quality, design or price, etc.

Theme Three: COO Effects in Purchasing Decision

6. Would you consider COO is important information to be considered before you purchase a laptop?
7. Would you personally prefer to buy a Chinese made or foreign made laptop?

Theme Four: Physiological Factor in Purchasing Decisions

8. If assuming the quality, price and other factors of the given products are the same standard, which one would you buy? What is the reason behind you choice?

3. Technological Advance	<input type="checkbox"/> ₁ <input type="checkbox"/> ₂ <input type="checkbox"/> ₃ <input type="checkbox"/> ₄ <input type="checkbox"/> ₅ <input type="checkbox"/> ₆ <input type="checkbox"/> ₇
4. Product Workmanship	<input type="checkbox"/> ₁ <input type="checkbox"/> ₂ <input type="checkbox"/> ₃ <input type="checkbox"/> ₄ <input type="checkbox"/> ₅ <input type="checkbox"/> ₆ <input type="checkbox"/> ₇
5. Brand Reputation	<input type="checkbox"/> ₁ <input type="checkbox"/> ₂ <input type="checkbox"/> ₃ <input type="checkbox"/> ₄ <input type="checkbox"/> ₅ <input type="checkbox"/> ₆ <input type="checkbox"/> ₇
6. Product Functionality	<input type="checkbox"/> ₁ <input type="checkbox"/> ₂ <input type="checkbox"/> ₃ <input type="checkbox"/> ₄ <input type="checkbox"/> ₅ <input type="checkbox"/> ₆ <input type="checkbox"/> ₇
7. Product Safety	<input type="checkbox"/> ₁ <input type="checkbox"/> ₂ <input type="checkbox"/> ₃ <input type="checkbox"/> ₄ <input type="checkbox"/> ₅ <input type="checkbox"/> ₆ <input type="checkbox"/> ₇
8. Product Durability	<input type="checkbox"/> ₁ <input type="checkbox"/> ₂ <input type="checkbox"/> ₃ <input type="checkbox"/> ₄ <input type="checkbox"/> ₅ <input type="checkbox"/> ₆ <input type="checkbox"/> ₇
9. Price Competitiveness	<input type="checkbox"/> ₁ <input type="checkbox"/> ₂ <input type="checkbox"/> ₃ <input type="checkbox"/> ₄ <input type="checkbox"/> ₅ <input type="checkbox"/> ₆ <input type="checkbox"/> ₇
10. Seasonal Pricing	<input type="checkbox"/> ₁ <input type="checkbox"/> ₂ <input type="checkbox"/> ₃ <input type="checkbox"/> ₄ <input type="checkbox"/> ₅ <input type="checkbox"/> ₆ <input type="checkbox"/> ₇
11. Value for Money	<input type="checkbox"/> ₁ <input type="checkbox"/> ₂ <input type="checkbox"/> ₃ <input type="checkbox"/> ₄ <input type="checkbox"/> ₅ <input type="checkbox"/> ₆ <input type="checkbox"/> ₇
12. Discounts	<input type="checkbox"/> ₁ <input type="checkbox"/> ₂ <input type="checkbox"/> ₃ <input type="checkbox"/> ₄ <input type="checkbox"/> ₅ <input type="checkbox"/> ₆ <input type="checkbox"/> ₇
13. Market Coverage	<input type="checkbox"/> ₁ <input type="checkbox"/> ₂ <input type="checkbox"/> ₃ <input type="checkbox"/> ₄ <input type="checkbox"/> ₅ <input type="checkbox"/> ₆ <input type="checkbox"/> ₇
14. Sales Distribution	<input type="checkbox"/> ₁ <input type="checkbox"/> ₂ <input type="checkbox"/> ₃ <input type="checkbox"/> ₄ <input type="checkbox"/> ₅ <input type="checkbox"/> ₆ <input type="checkbox"/> ₇
15. Product Availability	<input type="checkbox"/> ₁ <input type="checkbox"/> ₂ <input type="checkbox"/> ₃ <input type="checkbox"/> ₄ <input type="checkbox"/> ₅ <input type="checkbox"/> ₆ <input type="checkbox"/> ₇
16. After sales services	<input type="checkbox"/> ₁ <input type="checkbox"/> ₂ <input type="checkbox"/> ₃ <input type="checkbox"/> ₄ <input type="checkbox"/> ₅ <input type="checkbox"/> ₆ <input type="checkbox"/> ₇
17. Advertising	<input type="checkbox"/> ₁ <input type="checkbox"/> ₂ <input type="checkbox"/> ₃ <input type="checkbox"/> ₄ <input type="checkbox"/> ₅ <input type="checkbox"/> ₆ <input type="checkbox"/> ₇
18. Sales Force	<input type="checkbox"/> ₁ <input type="checkbox"/> ₂ <input type="checkbox"/> ₃ <input type="checkbox"/> ₄ <input type="checkbox"/> ₅ <input type="checkbox"/> ₆ <input type="checkbox"/>
19. Publicity	<input type="checkbox"/> ₁ <input type="checkbox"/> ₂ <input type="checkbox"/> ₃ <input type="checkbox"/> ₄ <input type="checkbox"/> ₅ <input type="checkbox"/> ₆ <input type="checkbox"/>
20. General Perception	<input type="checkbox"/> ₁ <input type="checkbox"/> ₂ <input type="checkbox"/> ₃ <input type="checkbox"/> ₄ <input type="checkbox"/> ₅ <input type="checkbox"/> ₆ <input type="checkbox"/>

21. I generally would prefer to purchase foreign made and branded laptop.

Strongly disagree

Neutral

Strongly agree

1

2

3

4

5

6

7

Appendix 3: SPSS Data Outputs

Appendix 3.1 Reliability Test Result

3.1.1 Result on Product Aspect Cues

Case Processing Summary

		N	%
Cases	Valid	194	100.0
	Excluded ^a	0	.0
	Total	194	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.821	8

Item Statistics

	Mean	Std. Deviation	N
Quality	4.51	1.309	194
Appearances	3.94	1.073	194
Technological Advance	4.40	1.210	194
Workmanship	3.93	1.257	194
Reputation	4.29	1.116	194
Functionality	3.71	1.319	194
Safety	4.10	1.333	194
Durability	3.58	1.266	194

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Quality	27.95	35.609	.404	.821
Appearances	28.52	35.360	.557	.800
Technological Advance	28.06	33.473	.621	.790
Workmanship	28.53	33.722	.570	.797

Reputation	28.16	33.682	.672	.785
Functionality	28.75	33.796	.528	.803
Safety	28.36	33.558	.537	.802
Durability	28.88	34.841	.481	.809

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
32.46	43.628	6.605	8

3.1.2 Result on Price Aspects Cues

Case Processing Summary

		N	%
Cases	Valid	194	100.0
	Excluded ^a	0	.0
	Total	194	100.0

- a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.830	4

Item Statistics

	Mean	Std. Deviation	N
Price Competitiveness	4.04	1.110	194
Seasonal Pricing	4.18	1.251	194
Value for Money	4.03	1.117	194
Discounts	4.04	1.344	194

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Price Competitiveness	12.24	9.643	.671	.781
Seasonal Pricing	12.10	8.725	.705	.763
Value for Money	12.25	10.055	.592	.813
Discounts	12.24	8.423	.675	.780

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
16.28	15.497	3.937	4

3.1.3 Result on Place Aspect Cues

Case Processing Summary

		N	%
Cases	Valid	194	100.0
	Excluded ^a	0	.0
	Total	194	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.809	4

Item Statistics

	Mean	Std. Deviation	N
Market Coverage	4.57	1.275	194
Sales Distribution	4.70	1.301	194
Availability	4.47	1.252	194
After Sale Services	4.57	1.417	194

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Market Coverage	13.74	11.083	.568	.787
Sales Distribution	13.61	10.509	.632	.758
Availability	13.84	10.736	.637	.756
After Sale Services	13.74	9.625	.671	.739

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
18.31	17.531	4.187	4

3.1.4 Result on Promotion Aspect Cues

Reliability Statistics

Cronbach's Alpha	N of Items
.711	3

Item Statistics

	Mean	Std. Deviation	N
Advertising	4.62	1.072	194
Sales Force	4.71	1.007	194
Publicity	4.89	1.050	194

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Advertising	9.60	3.090	.522	.630
Sales Force	9.51	3.238	.539	.610
Publicity	9.33	3.143	.527	.624

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
14.22	6.206	2.491	3

Appendix 3.2 Paired-Samples T-Test for

General Perception (Pair 20)

Nineteen Product Cues (Pair 1-19)

Purchasing Decisions (Pair 21)

Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Domestic Quality	3.68	97	1.142	.116
	Foreign Quality	5.33	97	.875	.089
Pair 2	Domestic Appearances	3.49	97	1.174	.119
	Foreign Appearances	4.39	97	.730	.074
Pair 3	Domestic Technological Advance	3.76	97	1.256	.128
	Foreign Technological Advance	5.04	97	.735	.075
Pair 4	Domestic Workmanship	3.59	97	1.188	.121
	Foreign Workmanship	4.30	97	1.012	.103
Pair 5	Domestic Reputation	3.79	97	1.258	.128
	Foreign Reputation	4.98	97	.816	.083
Pair 6	Domestic Functionality	4.27	97	1.114	.113
	Foreign Functionality	4.26	97	1.193	.121
Pair 7	Domestic Safety	4.58	97	1.059	.108
	Foreign Safety	4.60	97	1.096	.111
Pair 8	Domestic Durability	3.49	97	1.234	.125
	Foreign Durability	4.24	97	1.039	.105
Pair 9	Domestic Price Competitiveness	4.65	97	.804	.082
	Foreign Price Competitiveness	3.70	97	1.110	.113
Pair 10	Domestic Seasonal Pricing	4.88	97	.820	.083
	Foreign Seasonal Pricing	4.82	97	.902	.092
Pair 11	Domestic Value for Money	4.43	97	.865	.088
	Foreign Value for Money	3.62	97	1.194	.121

Pair 12	Domestic Discounts	4.80	97	.920	.093
	Foreign Discounts	3.27	97	1.263	.128
Pair 13	Domestic Market Coverage	5.18	97	1.061	.108
	Foreign Market Coverage	3.96	97	1.181	.120
Pair 14	Domestic Sales Distribution	5.56	97	.946	.096
	Foreign Sales Distribution	3.85	97	1.014	.103
Pair 15	Domestic Availability	5.11	97	.988	.100
	Foreign Availability	3.82	97	1.155	.117
Pair 16	Domestic After Sale Services	5.54	97	.936	.095
	Foreign After Sale Services	3.61	97	1.132	.115
Pair 17	Domestic Advertising	4.26	97	1.102	.112
	Foreign Advertising	4.98	97	.913	.093
Pair 18	Domestic Sales Force	4.61	97	1.204	.122
	Foreign Sales Force	4.81	97	.755	.077
Pair 19	Domestic Publicity	4.78	97	1.277	.130
	Foreign Publicity	5.00	97	.750	.076
Pair 20	Domestic General Perception	3.71	97	1.020	.104
	Foreign General Perception	5.16	97	.932	.095
Pair 21	Domestic Purchasing Decision	3.98	97	1.155	.117
	Foreign Purchasing Decision	4.29	97	1.274	.129

Paired Samples Test

		Paired Differences							
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference		t	df	Sig. (2-tailed)
					Lower	Upper			
Pair 1	Domestic Quality - Foreign Quality	-1.649	1.535	.156	-1.959	-1.340	-10.586	96	.000
Pair 2	Domestic Appearances - Foreign Appearances	-.897	1.381	.140	-1.175	-.619	-6.399	96	.000
Pair 3	Domestic Technological Advance - Foreign Technological Advance	-1.278	1.463	.149	-1.573	-.983	-8.606	96	.000
Pair 4	Domestic Workmanship - Foreign Workmanship	-.711	1.274	.129	-.968	-.454	-5.497	96	.000
Pair 5	Domestic Reputation - Foreign Reputation	-1.186	1.387	.141	-1.465	-.906	-8.419	96	.000
Pair 6	Domestic Functionality - Foreign Functionality	.010	1.220	.124	-.236	.256	.083	96	.934
Pair 7	Domestic Safety - Foreign Safety	-.021	1.060	.108	-.234	.193	-.191	96	.849
Pair 8	Domestic Durability - Foreign Durability	-.742	1.236	.125	-.991	-.493	-5.917	96	.000
Pair 9	Domestic Price Competitiveness - Foreign Price Competitiveness	.948	1.236	.126	.699	1.198	7.555	96	.000
Pair 10	Domestic Seasonal Pricing - Foreign Seasonal Pricing	.052	.602	.061	-.070	.173	.844	96	.401

Pair 11	Domestic Value for Money - Foreign Value for Money	.814	1.333	.135	.546	1.083	6.016	96	.000
Pair 12	Domestic Discounts - Foreign Discounts	1.536	1.588	.161	1.216	1.856	9.526	96	.000
Pair 13	Domestic Market Coverage - Foreign Market Coverage	1.216	1.549	.157	.904	1.529	7.733	96	.000
Pair 14	Domestic Sales Distribution - Foreign Sales Distribution	1.711	1.436	.146	1.422	2.001	11.739	96	.000
Pair 15	Domestic Availability - Foreign Availability	1.289	1.689	.172	.948	1.629	7.514	96	.000
Pair 16	Domestic After Sale Services - Foreign After Sale Services	1.928	1.583	.161	1.609	2.247	11.996	96	.000
Pair 17	Domestic Advertising - Foreign Advertising	-.719	1.419	.144	-1.005	-.432	-4.986	96	.000
Pair 18	Domestic Sales Force - Foreign Sales Force	-.206	1.361	.138	-.481	.068	-1.492	96	.139
Pair 19	Domestic Publicity - Foreign Publicity	-.216	1.438	.146	-.506	.073	-1.483	96	.141
Pair 20	Domestic General Perception - Foreign General Perception	-1.454	1.528	.155	-1.762	-1.146	-9.371	96	.000
Pair 21	Domestic Purchasing Decision - Foreign Purchasing Decision	-.309	2.028	.206	-.718	.099	-1.502	96	.136

Appendix 3.3 Independent T-test Result

Group Statistics

	Gender	N	Mean	Std. Deviation	Std. Error Mean
Domestic General Perception	male	39	3.69	1.055	.169
	female	58	3.72	1.005	.132
Foreign General Perception	male	39	5.18	.914	.146
	female	58	5.16	.951	.125

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Domestic General Perception	Equal variances assumed	.416	.520	-.150	95	.881	-.032	.212	-.453	.390
	Equal variances not assumed			-.148	78.929	.882	-.032	.214	-.459	.395
Foreign General Perception	Equal variances assumed	.227	.635	.125	95	.901	.024	.194	-.361	.409
	Equal variances not assumed			.126	83.871	.900	.024	.192	-.358	.407

Appendix 3.4 One-way ANOVA Result

Output between Different Age Groups

Test of Homogeneity of Variances

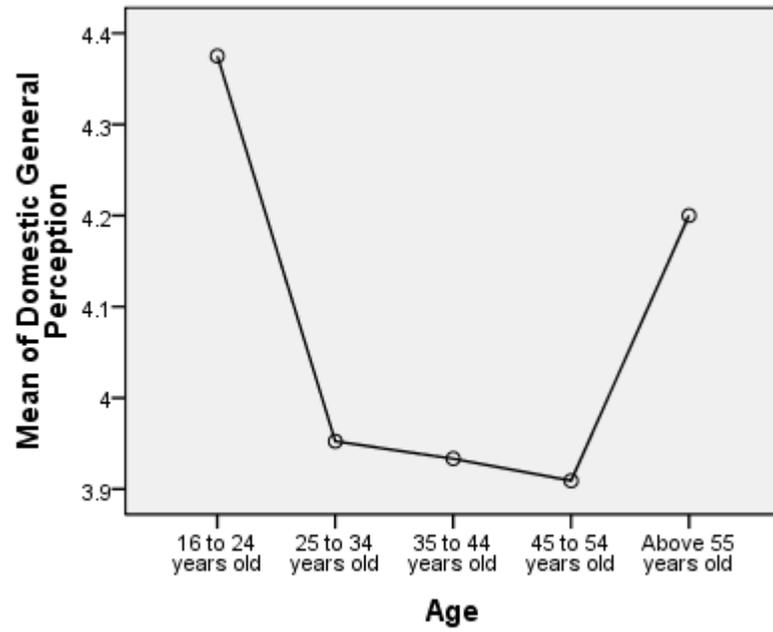
	Levene Statistic	df1	df2	Sig.
Domestic General Perception	1.435	4	92	.229
Foreign General Perception	1.204	4	92	.314

ANOVA

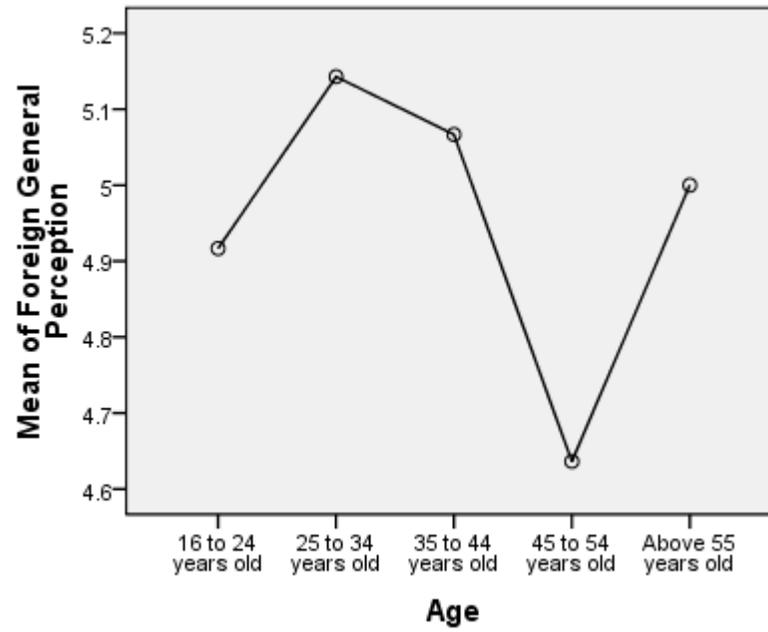
		Sum of Squares	df	Mean Square	F	Sig.
Domestic General Perception	Between Groups	3.457	4	.864	1.044	.389
	Within Groups	76.172	92	.828		
	Total	79.629	96			
Foreign General Perception	Between Groups	2.535	4	.634	.707	.589
	Within Groups	82.455	92	.896		
	Total	84.990	96			

Means Plots

Chinese Made Laptop



Foreign Made Laptop



Output between Different Education Groups

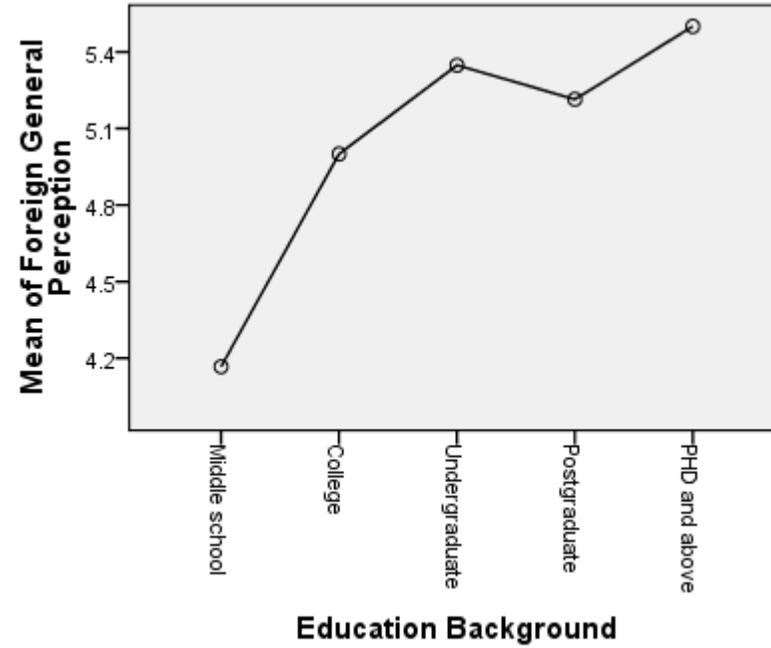
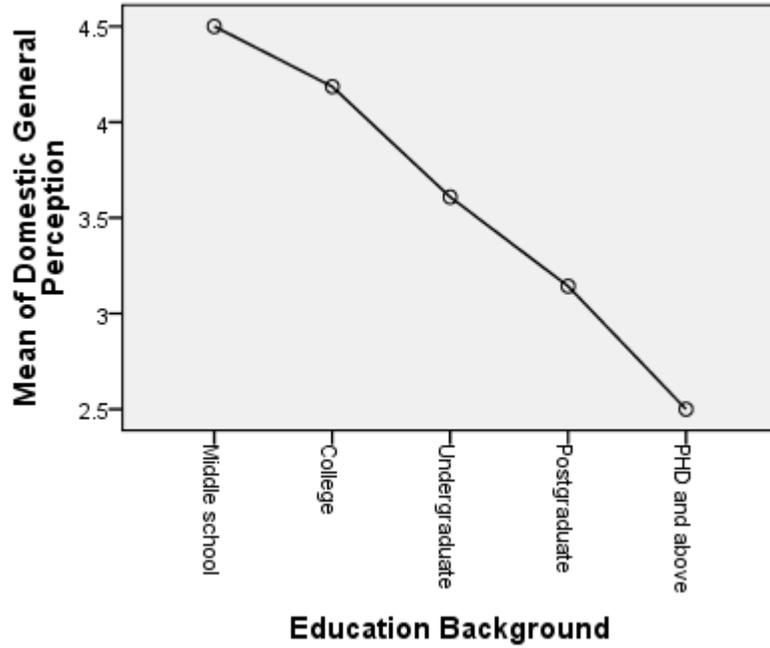
Test of Homogeneity of Variances

	Levene Statistic	df1	df2	Sig.
Domestic General Perception	2.693	4	92	.036
Foreign General Perception	.549	4	92	.700

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
General Perception on Chinese Made Laptop	Between Groups	20.673	4	5.168	6.000	.000
	Within Groups	79.245	92	.861		
	Total	99.918	96			
General Perception on Foreign Made Laptop	Between Groups	8.736	4	2.184	2.692	.036
	Within Groups	74.625	92	.811		
	Total	83.361	96			

Means Plots



Output between Different Income Groups

Test of Homogeneity of Variances

	Levene Statistic	df1	df2	Sig.
Domestic General Perception	1.532	4	92	.199
Foreign General Perception	1.298	4	92	.277

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
Domestic General Perception	Between Groups	12.413	4	3.103	3.263	.015
	Within Groups	87.505	92	.951		
	Total	99.918	96			
Foreign General Perception	Between Groups	12.203	4	3.051	3.944	.005
	Within Groups	71.158	92	.773		
	Total	83.361	96			

Means Plots

