Product-Country Images:
The Role of Country Image In Consumers' Prototype Product Evaluations

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by

Chan Woo Lee

Henley Management College
Brunel University

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ABSTRACT

What is the relationship between a country specific image and the image of products made in that country? What is the role of country image in consumers' product evaluations? While many of previous studies have examined the COO effects on consumers' *overall* quality perceptions of products, little work has been done on investigating the relationship between a country specific image, its product image, and consumers' purchase willingness.

A prototype car product, with fictitious country of origin from Germany, Italy, Korea and Malaysia, was developed for investigating consumers' perceptions, and for defining the role of country image in consumers product evaluations. In order to generalise research findings to the global context, tests with the questionnaires are conducted from 320 undergraduate students in four countries (United Kingdom, United States, Hong Kong, and Australia).

A review of the prior literature on country of origin effects, product-country images, and models of belief-attitude provided two constructs of country of origin (COO) and country of target (COT) as direction of this study. Finally, the literature review enabled the development of three main questions as basis of five hypotheses as follows; (a) Are there significant differences between consumer groups' attitudes toward a specific country and its prototype car products? (b) Are there significant differences between consumer groups' purchase willingness toward products from a specific country? (c) What is the role of country image in consumers' product evaluations?

Measuring instruments for this study were identified, as follows:

Constructs		Dimensions or Attributes
Country of Origin **(COO)** VS Country of Target **(COT)**	Country Image as Beliefs	Political, Economic, Technological Advancement, Social Desirability
	Product Image as Beliefs	Quality, Design, Prestige, Price, Technical Advancedness
	Attitude	Purchase Willingness

Three sets of hypotheses were tested in this study which were concerned with country image, product image, and purchase willingness as sub-constructs of COO and COT. Two statistical techniques were used to analyse the data - multivariate analysis of variance (MANOVA) and one-way analysis of variance (ANOVA).

This study contributes to the body of knowledge on country of origin in a number of specific ways: first, prototypes, rather than existing product are employed as stimuli; second, the construct of country of target (COT) was introduced and was conceptualised as a complement to that of country of origin (COO); and third, the interaction between these three elements is explored. Eventually, the finding of this research confirmed that the COT construct and its effects are potentially very important to the study of the role of country image and to business people exporting products from a particular COO.

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1.1 The Research Focus

What effect does the country a product comes from have on a customer's evaluations of that product? Do customers in different countries behave differently or similarly with regard to products from a third country? Do customers feel the same about cars from a particular country as they do about television sets from that country, or microwave ovens, or cans of beans, or wine? These are fundamental, but often overlooked issues when marketers embark on implementing strategy in a new market for their products or services. The globalisation of markets and multinational production within the last three decades has underscored the need for greater proficiency in understanding the impact of product-country image on cross-national consumer behaviour (Baughn and Yaprak, 1993). However, globalisation has also brought about numerous changes in the production and marketing of consumer goods (Terpstra, 1987), which has added significant complexity to the effects of country of origin on consumers' attitudes toward products.

Numerous studies have been conducted on product-country images since the mid-1960s. In general, most of these studies have found that consumers have significantly different country images or general perceptions about products made in different countries. However, many questions remain, according to Ozsomer and Cavusgil (1991). They have indicated that, although we may find the existence of country of origin effects,[1] we still do not have a clear understanding of why they exist and how they occur, because much of the research has simply focused on product quality measures to define country

[1] Country of origin effects are being defined in Chapter 2.

of origin effects. Furthermore, the content of product quality[2] has not been adequately conceptualised and appropriately measured in the research on product-country image. "Made-in" labels are used as predictors of product quality, especially where more explicit product information is missing (Nagashima, 1970; Reierson, 1967). Reierson (1966) and Bannister and Saunders (1978) note that people colour their overall evaluations and preferences by their image or stereotype of the country from which the product came.

Since the mid-1960s, a number of studies have been conducted to determine the relationship between consumers' perceptions of a country and their attitudes toward the products made in that country (i.e., Bilkey and Nes, 1982; Erickson, Johansson and Chao, 1984; Han and Terpstra, 1988; Johansson, Douglas and Nonaka, 1985; Lee and Sirgy, 1995; Oszomer and Cavusgil, 1991; Roth and Romeo, 1992). The country image as a cue can either summarise information about product quality, or act as a halo and influence beliefs regarding different aspects about the product. Han (1989) in his work on the halo and summary construct perspectives of country image effects supports the role of country image in the formation of a consumers' general perceptions of quality for products made in a given country.

Papadopoulos, Heslop and Bamossy (1990) found that country image perceptions may vary depending on the level of economic development of the country. Other research (Schooler et al., 1987) has shown, for example, that consumers' negative product evaluations based on country images constitute significant market barriers for companies from less developed countries. Thus, while numerous studies have reinforced the salience of country image in product evaluations, there is a general lack of investigation into the relationship between country of origin and country of target, and between country image and product image. More simply, might the country of origin effect be influenced by country of target (i.e., the country in which the country of origin research is conducted, or the target country in which a product is to be marketed)? It is also still not known exactly (1) how country image is utilised, and (2) how product evaluations are affected by country image. Moreover, most of the country of origin research has focused on

[2] The concept of quality used in this study is one of perceived quality (see Olson and Jacoby, 1972; Zeithaml, 1988 for a review).

reasonably well-known and accessible products, which already exist, such as televisions, refrigerators and cars. Few, if any, have considered really new products, not yet available on the market.

Thus, the study to be described here focuses on a review of the existing literature and research findings regarding country of origin effects. It then outlines experiments designed to collect data within different countries, to enable not only product-country images to be tested further, but also to explore the notion of country-of-target, and to test the effect of product novelty in various situations.

1.2 The Problem and Research Objectives

What is the nature of product-country image? Will country image affect a consumer's attitude toward products, and the intentions to purchase? What are the inter-relationships between country image, product image, country-of-target, product novelty, and consumers attitude toward the products? Easterby-Smith et al., (1991) argue that researchers are not keen on self-disclosure, and they rarely explain precisely where their ideas and questions have come from. In this study, the basic question comes from what the relationships are between the image of a country, and the image of the products made in that country, the country of target of the customers, and the novelty of the product.

Consumers form country images based on their prior experience and knowledge with products from a given country. Previous researchers (Gaedeke, 1973; White and Cundiff, 1978; Eroglu and Machleit, 1989) have strongly suggested a close link between country image as country of origin and consumers' attitude as perceptions of product quality. In general, previous research agrees that consumers have significantly different global or general perceptions about products made in different countries (Bilky and Nes, 1982).

The success of products from countries of low production costs (presumably under-developed countries) in the marketplace seems to contradict some of the implications

derived from previous country image studies (Tse and Lee, 1993). In particular, country image studies consistently confirm that negative country images adversely affect consumers' product evaluations. Whatever the underlying psychological mechanisms, whether halo (Johansson, Douglas, and Nonaka, 1985), summary construct (Han, 1989) and/or other psychological mechanisms (Hong and Wyer, 1990), the consensus is that an unfavourable country image will negatively distort a consumer's product evaluation across product type (Han and Terpstra, 1988).

The research problems come from the basic argument of the potential effects of country image on consumers' beliefs concerning products from that country, and these have been studied extensively (e.g., Anderson and Cunningham, 1972; Nagashima, 1977; Reierson, 1966; Schooler, 1965). Although numerous studies have been conducted on the issue of country image and product image, it is still unclear how country image affects consumer evaluations of specific products and how strong the effect is.

Most studies analysing the country of origin effects at the brand level merely report the existence of differences in perceived quality between indigenous and foreign brands and between foreign brands. There are few studies which have examined consumers' attitudes toward products through the differentiation of beliefs on countries and products (cf, Halfhill, 1980). Most previous research has not compared the differences between consumer groups from different levels of economic development and from different consumer markets - or countries of target.

Thus, the primary objectives of this study are:

- to describe the nature of product-country images,
- to determine dimensions of country image and attributes of product image,
- to identify the differences between countries of target, that is, consumer groups' beliefs concerning a country and its products,

- to examine consumers' beliefs and attitudes toward a specific prototype, or new, product which purportedly comes from countries of different levels of economic development,
- to define the effects of country image vs. specific product image on consumers' propensity to purchase, and, finally,
- to identify whether country image acts as a halo function or summary construct function in consumers' product evaluations.

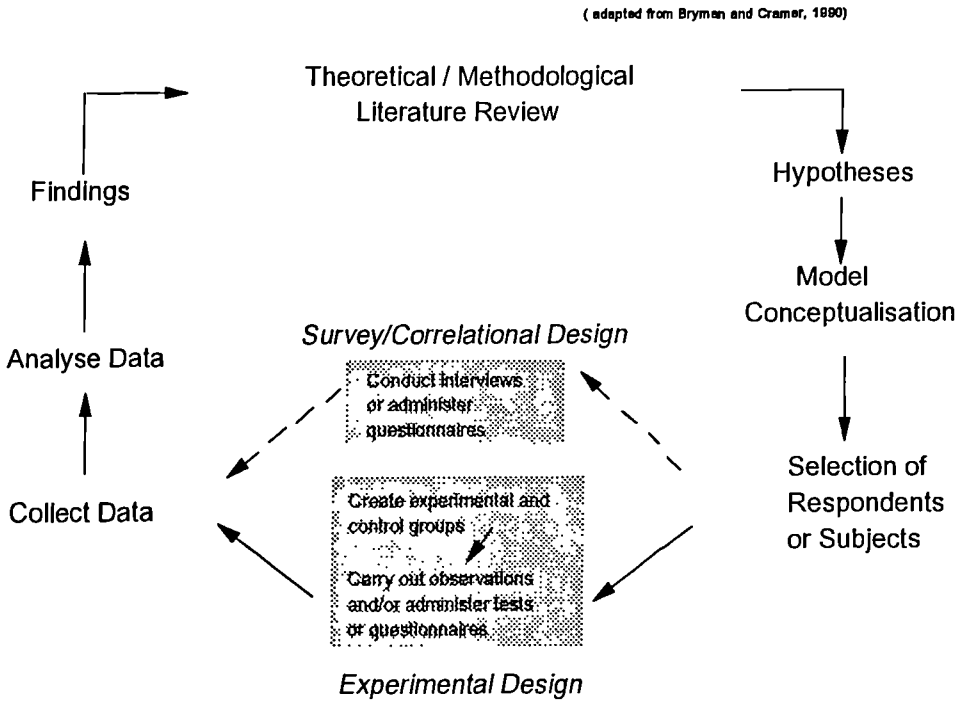
The secondary objectives of this study are to:

- provide an in-depth review of the existing literature in this area,
- identify the differences between consumers' beliefs concerning the country of origin when the country of origin can be a more or less developed country, and then to
- test the relationships between country image and purchase propensity, and product image and purchase willingness by country of origin (COO) by country of target (COT).

To meet these objectives, it was decided that an automobile be selected for the study, because this is a product category in which most consumers are considered likely to be aware of the product's country of origin. Erickson et al., (1984) for example, also examined this single product, automobiles, for which considerable information is readily available and for which evaluations are likely to be based on some objective characteristics. Fundamentally, an advantage of using automobiles is that the country of origin has become an important factor in this market, and furthermore, country of origin is relatively easy to identify for this product class. Although Johansson et al (1985) claimed that ongoing research on country of origin is required and should utilise more representative samples and other types of products, there are a number of studies on car products to test country of origin effects on consumers' product evaluations (i.e., Brown et al., 1987; Han, 1989; Han and Terpstra, 1988; Elliott and Cameron, 1994; Johansson et al., 1985; Erickson et al., 1984; Etzel and Walker, 1974).

Figure 1.1 provides an illustration of the chief steps in the process of this research.

Figure 1.1: The Research Process



1.3 Outline of Research Methodology

Although research on product-country images has been reasonably successful in identifying country image effects on product evaluations (Bilkey and Nes, 1982; Erickson et al., 1984; Johansson et al., 1985), most published work contains little or no discussion on the appropriateness of their research methodology (Han et al., 1994). Key questions are;

- Are their survey modes appropriate for product-country image research? and
- What types of response bias might have been present in their measurement of product-country images?

Until these methodological issues are resolved, the generalisation of previous findings may not be warranted (Han et al., 1994). Martin and Eroglu (1993) claimed that from a theoretical standpoint researchers in the area of product-country image effects have become increasingly sensitive to its theoretical and methodological dimensions (e.g., Jaffe and Nebenzahl, 1984; Parameswaran and Yaprak, 1987). Han (1989) also noted that there is no validated instrument available to assess country image without tapping into the image of products from the respective country.

The research methodology, including the rationale for selection of the product, sampling, data collection procedures, measures, and data analysis, is presented in this study in Chapter 4.

1.3.1 Country and Product Selection

Following an analytic review of previous research[3], dimensions of country image and product attributes are illustrated in Table 1.1. The four dimensions of country image are political, economic, technological, and social desirability. The five attributes of the product are quality, design, prestige, price and technology. As previously discussed, automobiles as a prototype product are examined in this study because they are relatively well known to most levels of consumers.

In order to generalise research findings to a more global context (Roth and Romeo, 1992), experiments were conducted in four countries of target, namely, Australia, Hong Kong, the UK, and the USA. Automobile products were selected as being from four national origins[4] or country of origin, namely, Germany, Italy, Korea, and Malaysia, with the first two generally regarded as developed countries, and the latter generally regarded as developing.

[3] See Table 2.3 in Chapter 2 for a review.

[4] Ahmed et al. (1995) argued that country of origin studies must be conducted both in developed countries and in newly industrialising countries (NICs).

Table 1.1
Dimensions of Country Image and Product Attributes

Country of Origin (Cars from[5])	Dimensions of Country Image	Car Product Attributes	Data Collection from
Germany Italy Korea Malaysia	Political Economic Technological Advancement Social Desirability	Quality Prestige Technical Adv. Design Price	United Kingdom United States Hong Kong Australia

1.3.2 Questionnaire Design and Data Collection

The questionnaires on country image and product image were developed based on Nagashima's work (1970, 1977)[6] which has been adapted by various researchers in this field (i.e., Narayana, 1981; Cattin, Jolibert, and Lohnes, 1982). The questionnaire consists of three parts - questions on country image, product image, and general descriptive information. The questionnaires on product image were accompanied in the experiments by an hypothetical product brochure.

In order to verify the hypotheses, the data was collected through self-administered questionnaires, from controlled convenience sampling groups within undergraduate business classes at universities in the United Kingdom, United States, Hong Kong, Australia.

1.3.3 Measurement

The format selected to measure product-country images in this study is the semantic differential scale. The theoretical rationale for using the semantic differential scale in this study to measure, assess, and compare the image of a concept or object is to be detailed

[5] To minimise the subjects' overestimation or underestimation the country of origin effect (Brown et al. 1987).

in Chapter 4. Four country image dimensions and five product attributes are measured on seven-point semantic differential scales. Measuring instruments for each construct are summarised in Table 1.2.

Table 1.2
Measuring Instruments for the Study

Constructs		Dimensions	Measured by:
Country of Origin (COO) VS Country of Target (COT)[7]	Country Image as Belief	Politic Economic Technological Social Desirability	Nagashima (1970). Halfhill (1980). Martin & Eroglu (1993)
	Product Image as	Design Prestige Price Technology	Nagashima (1970). Etzel & Walker (1974). Halfhill (1980). Han (1989)
	Attitude	Purchase Willingness	Roth and Romeo (1992)

1.3.4 Analysis Methods

This research adopts an attribute-based approach to the identification of independent variables for the constructs of product and country images. The ratings of the constructs on each of the items are subsequently analysed using typically either factor or discriminant analysis to identify the key dimensions that consumers use to distinguish the product and country images. The statistical techniques used to test the hypotheses are, multivariate analysis of variance (MANOVA) and covariance (MANCOVA) for constructs of country of origin (COO) and country of target (COT), and one-way analysis of variance (ANOVA) for individual comparison of independent variables. An analysis matrix is developed of four country of origin X four country of target, which results in 16 cells. This enables the verification and explanation of relationships between two constructs, country of origin (COO) by country of target (COT), and sub-constructs of country image, product image and purchase willingness as consumers' beliefs and attitudes.

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[6] See Appendices B and D.

[7] Country of target (COT) was identified in this study as a construct for product-country images study.

1.4 Outline of the Thesis

What follows is organised thus: This chapter introduces the basic research objectives and research methodology, and provides an outline. Chapter Two reviews the literature relevant to the product-country image issues for the last three decades, which is concisely summarised in Table 2.3, and suggests theoretical backgrounds for the role of country image as a cue in consumers' product evaluations. Existing theoretical models of belief-attitude and causal models, e.g., a halo and a summary construct, are reviewed. Finally, Chapter Two summarises briefly the results of the literature review as basic groundwork for this study.

In Chapter Three, hypotheses are developed, and an hypothesised model to interpret the three subconstructs from the basis of the literature review in Chapter 2 is proposed. Chapter Four discusses the nature of research, and particular methodological issues in research design. It explains the research techniques employed in this study. This chapter also presents initial descriptive statistics of data analyses with factor analysis for factor loading, instrument reliability and validity. Chapter Five describes the respondent characteristics, and tests some results using multivariate analysis of variance (MANOVA). This chapter also summarises the results of analyses by country of origin (COO) and by country of target (COT).

Chapter Six present the results of analysis of variance (ANOVA) for each individual variable of country image, product image and purchase willingness. The results are presented as tests of hypotheses, which are summarised as tables at the end of each analysis of country of target (COT). Chapter Seven summarises the study and its findings, and presents a discussion of the implications and conclusions of the research. This chapter also considers the limitations of this study, implications for managers, and suggests possibilities for future research.

1.5 Contributions of the Research

The study is likely to explicate many aspects of how product-country images affect consumers' attitudes towards a specific product, and it, therefore, has theoretical and practical marketing implications. This study also intends to find a valid operational measure which may help resolve the deficiency in our knowledge about the mechanism of the role of country image. The research should hopefully make a contribution to the conceptualisation of a construct of country of target (COT) based on an in-depth literature review and the development of theory through the test of a concept of country of target (COT) in the area. Furthermore, this study conducts tests practically for the concept of country of target (COT), within consumer groups from four continents, and hopefully offers useful managerial implications.

Chapter 2
Country of Origin Effects, Products and Intentions to Purchase: A Review of the Literature

2.1 Introduction

For the basis of this study, this chapter provides an in-depth review of the literature on product-country image for the conceptual foundations of country of origin (COO) and country of target (COT). It also evaluates the findings of previous studies of product-country image issues. Previous research into these issues is analysed closely in terms of chronology and summarised.

A brief introduction to this chapter: First, there is an in-depth review of previous studies on the nature of country image, country of origin, country of origin effects, the made-in concept and the role of country image in product evaluations. Previous studies of product-country image issues are summarised by those major factors which have been reported to induce the country of origin effects in product evaluation: i.e., country characteristics, consuming countries, product attributes, and subjects. Secondly, this chapter includes a brief overview of theoretical models (cf. Han's, 1989; Johansson's, 1989) and methodologies employed in the various studies which are included. Finally, a summary will be given of the findings and conclusions of this review.

Image is shaped by mass communication, personal experience and views of national opinion leaders (Nagashima, 1970). For the conceptualisation of country of target (COT), as discussed in this chapter, country image is defined as consumers' overall perception of a specific country which is created by national characteristics (e.g., Nagashima, 1970; Roth and Romeo, 1992). Country of origin, or "made-in" label, is defined as the country where the corporate headquarters of the company marketing the product or brand is located (e.g., Johansson, Douglas, and Nonaka, 1985).

2.2 Country Image

Country image has been an important research topic for many years (e.g., Bilky and Nes, 1982; Li, Dant, and Wortzel, 1995; Schooler, 1965). The growing literature on country image has indicated that consumers hold stereotyped product-country images, which subsequently affect their purchase decisions (Martin and Eroglu, 1993; Baughn and Yaprak, 1991). It has been generally agreed that country image affects consumer's product evaluations.

Johansson (1989, p.49) pointed out that in conceptual terms, the main thrust of the studies in the area has been as "effect" studies rather than "theory" studies. Most of the studies have described country biases and demonstrated some empirical relationships between product-country images and the underlying determinants (Johansson, 1989; Martin and Eroglu, 1993). Past studies generally support the conclusions that (a) consumers hold stereotyped images of both foreign countries and their own, and (b) these images are used as information in evaluating products of various origins (Bilkey and Nes, 1982; Han, 1989).

Country image has been consistently identified as a multi-dimensional concept. Papadopoulos (1993, p.8) notes that the image of countries, in their role as origins of products, is one of the extrinsic cues that may become part of a product's total image. One of the first studies to look at country image perceptions was Nagashima's (1970) survey of US and Japanese businessmen. Nagashima defined country image as;

> the picture, the reputation, the stereotype that businessmen and consumers attach to products of a specific country. This image is created by such variables as representative products, national characteristics, economic and political background, history, and traditions (Nagashima, 1970, p.68).

Narayana's (1981, p.32) definition of country image is quite similar - "*the aggregate image for any particular country's product refers to the entire connotative field associated with that country's product offerings, as perceived by the consumer*".

Furthermore, Martin and Eroglu (1993, p.193) define the country image (a broader conceptual definition) as "*the total of all descriptive, inferential and informational beliefs one has about a particular country.*"

From a marketing perspective, a definition of country image which was proposed by Roth and Romeo (1992) is:

> 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.

Bamossy and Papadopoulos (1987) summarised country images as follows:

- consumers hold stereotyped images of both foreign countries and their own;
- these images are used as information cues in evaluating products of various origins;
- the relative importance of origin cues differs according to buying situations and product categories;
- buyers are not always aware of products' true origins but are able to express preferences for production locations;
- "made in" images can act as a halo (e.g., evaluation of one product or sector of activity in a given country may influence the judgement or other products or sectors from that country);
- the extent of consumer preference for domestic vs. foreign goods varies by origin and destination country; and
- like price, brand, and other intangible extrinsic attributes, country-of-origin may serve as a surrogate of product quality (especially when other information is lacking and/or in the case of complex market conditions).

As Martin and Eroglu (1993, p.193) noted, as yet, there is no validated instrument available to assess country image without tapping into the image of products from the respective country. Papadopoulos (1993, p.8) claims that the term of product-country image is felt to be broader and represents more accurately (than "country-of-origin" or "made-in") the phenomenon under study. Thus, in this study, country image is defined as

consumers' overall perception of a specific country which is created by national characteristics and as one of the extrinsic cues that may become part of a product's total image.

2.2.1 Country of Origin

A product's country of origin is used by customers to reinforce, create, and bias initial perceptions of products (Johansson, 1993), and is usually communicated by the phrase, "made in (name of country)" (Bilkey and Nes, 1982; Thorelli, Lim, and Ye, 1989). It may also be used as a shortcut basis for consumer judgements without the individual considering other information about the product (Hong and Wyer, 1989).

Products may be conceived of as an array of information cues, both intrinsic and extrinsic. Consumers' use of both intrinsic cues (taste, design, performance; physical product characteristics) and extrinsic cues (price, brand name, warranties, country-of-origin; non-physical product characteristics) in evaluating products has been studied and reported in the literature extensively. Particularly, *the use of country of origin cue* by consumers is in fact growing (e.g., Han, 1989). The increasing use of country of origin information by buyers and sellers has helped to generate substantial research interest in product and country images.

Papadopoulos, Heslop and Bamossy (1990) outline three main explanations for this. First, consumers often try to simplify information processing in today's complex marketplace through "chunking", using product origins as surrogate indicators of product quality and social acceptability. Second, there is heightened consumer awareness of, and familiarity with, foreign products and the differences among them as a result of exposure to media reports and other stimuli about foreign countries and their products. Finally, the growing use of country image identifiers by marketers aiming to define unique product positions against their competitors, and "buying domestic" campaigns,

which, while aiming to protect domestic manufacturing, also highlight differences among product origins.

Country of origin is an extrinsic product attribute that indicates the country in which a product is manufactured and/or assembled. Although the studies by Erickson, Johansson, and Chao (1984) and Johansson, Douglas, and Nonaka (1985) report that the country of origin affects consumers' rating on only certain attributes of products, but not consumers' overall evaluations of the products, the majority of previous studies indicate the salience of country of origin in overall product evaluation.

Various research has offered a range of definitions explaining country of origin (e.g., Bilkey and Nes, 1982; Han and Terpstra, 1988; Johansson, Douglas, and Nonaka , 1985; Thorelli, Lim and Ye, 1989; Wang and Lamb, 1983). In general, country of origin reflects the home country for a company that consumers infer from brand name (Ozsomer and Cavusgil, 1991), whereas the country of manufacture is factual information about final point of assembly, which is manifested in the made-in label (Lee and Sirgy, 1995).

Cordell (1992) notes that country of origin is, as an extrinsic product cue, a class of intangible product traits which include a product's brand and price. Unlike physical characteristics, a change in these cues has no direct bearing on the product's performance. Since it may be difficult to interpret intrinsic cues prior to purchase, the consumer will often resort to using extrinsic cues as the basis on which to make inferences regarding the product. That is, the use of country of origin as a proxy and surrogate for other information suggests that prior experience or familiarity with a particular product class or brand may influence the impact of country of origin on evaluations.

Thus, consumers familiar with a specific product class may be less likely to rely on country of origin as a cue in product evaluation. Similarly, favourable or unfavourable experience with products or brands from a specific country may colour evaluations of other products or brands from that country (Johansson et al, 1985). For example,

Daewoo may be crusading for the Korean automobile industry. Its success in the European markets may create market externalities from which the industry will benefit. Conversely, its failure may produce an enormous entry barrier for Korean automakers later entering European markets.

Country of origin has been characterised as a multidimensional construct. Consumers may evaluate countries' products by criteria such as price, styling, quality, or availability. These product-traits may shift as consumers' perceptions change with increased exposure to the country, or as the dimensions of the products from the countries (Cordell, 1992; Nagashima, 1970, 1977). Moreover, a product's country of manufacture has been found to serve as a "surrogate indicator" and hence is a salient dimension of overall evaluation in the event that little else is known about the product (Cattin et al., 1982; Schooler, 1965).

Country of origin can be viewed as a simplifying heuristic for product evaluations (Han, 1989; Johansson, 1989). When individuals are unable or unwilling to make an evaluation based on intrinsic attributes, they may rely on their knowledge and beliefs about country of origin to make inference about other product attributes (Huber and McCann, 1982; Jacoby, Olson and Haddock, 1971; Olson and Jacoby, 1972; Olson, 1977). For example, a consumer may know very little about an automobile's technical attributes and therefore be unable to make appropriate evaluations based on this intrinsic information. However, the same consumer may believe that Italy produces extremely well-designed cars. This country stereotype would lead the consumer to infer that Fiat styling is better. It has been well established that country of origin connotes different product images or stereotypes in consumers' minds (Bannister and Saunders, 1978; Chao, 1989; Lillis and Narayana, 1974; Nagashima, 1970; Reierson, 1966; Schooler and Wildt, 1968; Schooler, 1971).

Chao (1993) argues that country of origin should no longer be treated as synonymous with the " made in" or " assembled in" concept. It may include a " designed in" or " engineered in" concept. Han and Terpstra (1988) found that the country of manufacture, as "made-in" label, has a greater effect on brand evaluation than brand name (as country of origin). However, with the separation of manufacturing or assembly location from the

country with which the firm or brand is associated, the term of "origin" has become vague (Ulgado and Lee, 1993).

In this study, country of origin is defined according to Johansson, Douglas, and Nonaka (1985, p.389):

> Country of origin is defined as the country where the corporate headquarters of the company marketing the product or brand is located. Though we recognise that the product may not necessarily be manufactured in that country because of multinational sourcing, we assume the product or brand is identified with that country.

2.2.2 "Made In" Concept

The "made in" theme has a long history. Morello (1993) reports that "made in" labels (Banister and Saunders, 1978; Chasin and Jaffe, 1979; Gaedeke, 1973; Li, Dant, and Wortzel, 1995; Nagashima, 1970, 1977) have been used to identify product origins for at least 100 years (e.g., Great Britain's Merchandise Marks Act of August 23, 1887). The Merchandise Marks Act arose from protectionism. Its main objective was to make it illegal to sell an article made abroad which had upon it any word or mark that might fraudulently lead the purchaser to believe that it was of domestic manufacture. It was the birth of the "made-in" label.

The "made in" cue elicits the image (i.e. the reputation or stereotype) commonly attached to products from a specific country (Niffenegger, 1980). Johansson (1989) noted that "made-in" labels are used as predictors of product quality, especially where more explicit product information is missing (Nagashima, 1970; Reierson, 1967). The made-in label will influence the beliefs about the product (in line with the product quality results) and thus be reflected in the product's perceived attribute scores (Erickson, Johansson and Chao, 1984).

Li, Dant, and Wortzel[1] (1995) argue that a "made-in" label may just be one of the critical information cues needed to activate consumers' country image schema. The made-in label frequently does not directly affect product quality evaluations (Li, Dant and Wortzel, 1995), but country image invoked by the "made-in" label does (Heslop, Papadopoulos, and Bamossy, 1993; Yoo, 1992) (i.e., Made-in Label, as country of origin → Country Image → Product Quality). That is, country image has a mediating role in product quality evaluation in the mechanism of country of origin effects.

The "made-in" label denotes the location of manufacture or assembly of a product. It can mean manufactured-in (Cattin et al., 1982; White, 1979), assembled-in (Ahmed et al., 1995,), designed-in (Ahmed, d'Astous and d'Almeida, 1995; Chao, 1993), or engineered in (Chao, 1993). But, as Ahmed et al., (1995), Johansson (1989) and Morello (1993) noted, a "made in" label provides consumers with information about where product parts were manufactured; where all subassembly occurred; and where final assembly, such that the product was ready for the end user, happened. They also noted that "assembled in" reveals only where final product assembly or finishing was performed and gives no information about where the parts were made or any subassembly occurred, although many products these days include parts and components from several countries. Therefore, "made in" is the more definitive country of origin cue and will have greater predictive and confidence value than "assembled in."

In consumer choice, the "made-in" concept is closely related to the country image that has been developed by consumers. Since the "made-in" label can be an important informational cue for consumers, country image may play a major role in consumer responses to domestic and, in particular, foreign products and brands. Thus, the "made-in" notion is a matter of tremendous importance in international marketing strategy, and the "made-in" label will influence the beliefs about the product (Johansson, 1989), especially where more explicit product information is missing (Nagashima, 1970;

[1] Li et al., (1995) found that made-in label did not directly affect perception of product quality. They operationalised Garvin's taxonomy for conceptualising product quality dimensions. Garvin (1984) has proposed eight dimensions: performance, features, reliability, durability, conformance, serviceability, aesthetics, and image, which have not been utilised by country of origin researchers.

Reierson, 1967), and thus the "made-in" label provides a brief summary of the actual attributes of a product.

2.2.3 Country of Origin Effects

The country of origin literature has been accused of lacking in theory building and focusing only on operational level as opposed to construct level (Li, Dant and Wortzel 1995). As a result, there is limited knowledge about the mechanism of country of origin effect (Hong and Wyer, 1989; Pisharodi, Yaprak, and Parameswaran, 1991). Only recently a few theoretical models have been proposed to explain country of origin effects on product evaluations (i.e., Han, 1989; Johansson, 1989; Obermiller and Spangenberg, 1989).

Country of origin effects have been broadly defined as any influence, positive or negative, that the country of manufacture might have on the consumer's choice processes or subsequent behaviour. Country of origin effect refers to how consumers perceive products emanating from a particular country. For instance, the country cue can either summarise information about product quality, or act as a halo and influence beliefs regarding different aspects about the product (Janda and Rao, 1995).

The potential effects of country of origin on consumer behaviour have been studied extensively over thirty years. While subsequent research has stressed the complexity of the "country-of-origin" or "made-in" phenomenon, issue, effect, or cue, it has also reaffirmed its significance and its potential impact on consumer choices (e.g., Johansson, Douglas, and Nonaka, 1985).

The existence of the country of origin cue, to which the consumers can attach meaning, has spawned a stream of consumer and industrial buying research on country of origin effects. Johansson, Douglas, and Nonaka (1985) found some significant effects of the country of origin on ratings of specific product attributes, but non-significant effects on

overall product ratings (see also Hampton, 1977). Erickson, Johansson, and Chao (1984) and Johansson, Douglas, and Nonaka (1985) examined country of origin effects for well-known brands of car from Germany, Japan and the US, and found no such significant effects on subjects' attitudes towards the brands. This may be attributable to the role of country image as a halo. In other words, consumers do not rely on country image when they are familiar with the products (Han, 1990).

In general, country of origin effects operate in three distinct ways. First, consumers may simply use the country of origin cue as one of many attributes used to form product evaluations (Hong and Wyer, 1989). Second, the country label may create a halo effect whereby consumer's attention and evaluation of other product attributes are affected (Han, 1989; Hong and Wyer, 1989, 1990). Finally, country of origin may be conceptualised as a form of country stereotyping which consumers use to "fill in" missing information that is not supplied to them (Bilkey and Nes, 1982; Hong, 1987).

Chao (1993) argues that as a result of rapid changes and development in the global business strategic environment, product country association is no longer just a single country phenomenon. So-called "hybrid" products, i.e. products designed in one country but manufactured in another country, are increasingly appearing in the global marketplace. In the context of these new realities, researchers interested in studying country of origin effects must distinguish between the country where a product is designed or engineered and the country where it is assembled and also adopt a research approach where other informational cues such as brand name, price and warranty are presented along with country of origin.

Concerned that country of origin effects constituted invisible or informal barriers to trade, Schooler (1965) was the first to identify product bias on the basis of national origin in his seminal work. Since then, country of origin effects have been identified in numerous consumer studies in many different countries (Reierson, 1967; Nagashima, 1977; Baumgartner and Jolibert, 1977); across nations at various stages of economic development (Cordell, 1985; Gaedeke, 1973; Morello, 1984; Papadopoulos et al., 1990;

White and Cundiff, 1978); and in industrial purchasing (Hakansson and Wootz, 1975; White and Cundiff, 1978).

On the other hand, a number of studies have argued that country of origin effects do not exist, or that if they do, they are of only minor significance in the wide array of influences on the purchase decision. Johansson et al. (1985), Olson and Jacoby (1972), and Erickson et al. (1984) all cast doubt on the significance of country of origin effects.

Country of origin effects can have negative impacts on consumer brand awareness and choice. However, the majority of studies support the assertion that country of origin effects do exist, although the magnitude and the mechanism of influence remains unresolved (Elliott and Cameron, 1994). Although the country of origin effect has been the impetus for a number of studies over the past thirty years, as far as the precise nature of the country of origin effect is concerned, this is still unclear in that it has been found to vary widely across product categories, respondent groups, and studies employing different methodologies.

2.3 The Role of Country Image

The role of country image has been studied in a variety of research settings such as field surveys and laboratory experiments. In general, the role of country image operates in three ways. First, consumers may simply use the country image cue as one of many attributes used to form product evaluations (Hong and Wyer, 1989). Alternatively, the country image may create a halo effect whereby consumer's attention and evaluation of other product attributes are affected (Han, 1989; Hong and Wyer, 1989, 1990). Finally, country image may be conceptualised as a form of country stereotyping which consumers use to "fill in" missing information that is not supplied to them (Bilky and Nes, 1982).

Country image is one of the extrinsic cues that may become part of a product's total image. Country image, as an extrinsic cue, may play dual roles, both as a surrogate and

as a summary construct (Baughn and Yaprak, 1993). Han (1989) has posited two directions of the country image effects: as a "halo construct" (country image used to evaluate products about which people know little) or as a "summary construct" (knowledge about a country's products abstracted into the image of the country itself).

First, buyers can use country image in product evaluations when they are unable to detect the true quality of a country's products before purchase (halo function). As such, country image indirectly affects brand attitudes through inferential beliefs. Second, as buyers become more familiar with a country's products, country image may help them summarise their product beliefs and directly affect their brand attitudes (summary function). Either of two views (Han, 1989) on the role of country image may explain the role of country image in product evaluations.

2.3.1 As a Halo Function

When consumer confidence in the product quality of a country is widespread, s/he is likely to generalise such quality perceptions to a wide variety of products from that country creating a halo effect (Erickson, Johansson and Chao, 1984; Han, 1989, Hanssens and Johansson, 1991). If the consumers have little or no product information, country image may tend to act as a halo stimulating the general concepts about the country in the consumers' product evaluation process (Tse and Lee, 1993).

The halo view maintains that consumers use country image in product evaluation because they often are unable to detect the true quality of a country's products before purchase. Furthermore, because of consumers' inability to detect true quality, they may turn to country image to infer the quality of unknown products (Huber and McCann, 1982).

Most previous studies (e.g., review by Bilkey and Nes, 1982; Johansson, 1989) argued that consumers use the country images as a halo to infer their product evaluation. This resembles stereotyping processes, where the country image represents the cause of

stereotyping that initiates cognitive and/or motivational biases in affecting the subsequent judgements. This effect can also be explained by impression formation (e.g., Hong and Wyer, 1989) where country image may activate concepts about the country. These concepts would then affect the interpretation of other product attributes: favourable (and unfavourable) concepts would elicit favourable (and unfavourable) evaluations on the other product attributes (Tse and Lee, 1993).

Country image may have direct influence on purchase intention. However, if country image serves as a halo, it will have no significant effect on product evaluation when consumers are familiar with products from the country (Johansson, Douglas, and Nonaka, 1985). The halo hypothesis suggests that consumers may consider not buying an unfamiliar foreign brand simply because they may make unfavourable inferences about the quality of the brand from their lack of familiarity with products from the country.

The halo hypothesis has another theoretical implication on the generality of country image. Like halo effects in multi-attribute attitude models (Bass and Talarzyk, 1972; Beckwith and Lehmann, 1975), consumers may tend to rate specific attributes of a country's products in accordance with their overall perception of the products (country image), when they are not familiar with the country's products.

Country image may serve as a halo from which consumers infer the attributes of products. Thus, one may hypothesise that country image is more generalisable across attributes of country image; that is, there is a stronger association between country image and product attributes when consumers are not familiar with the country's products than when they are (Han, 1990). Therefore, in the halo view, country image affects beliefs about tangible product attributes, which in turn affects overall evaluation. This view has been supported (Erickson, Johansson, and Chao, 1984; Johansson, Douglas and Nonaka, 1985).

2.3.2 As a Summary Construct Function

Country image, like brand image, can be viewed as a summary construct. Tse and Lee (1993) noted that, faced with daily information overloads, consumers are known to process information by chunks as a heuristic to avoid detailed processing of each product attribute available. In evaluating product quality, for example, Johansson (1989) suggested that country of origin will likely be used in similar ways as brand names. This "summary statistics" argument is consistent with Hong and Wyers' (1989) heuristic hypothesis and Han's (1989) summary construct model.

A number of studies try to specify the boundary conditions prescribing the operation of the above psychological mechanisms. For example, it is suggested that the more the consumers know about the product class, the more likely they may use country image information as a summary statistic, because with a lot of product information available, it would be more efficient to use country image as a symbol to represent (or summarise) sets of product attributes (i.e., Johansson, 1989). Thus chunking or the "summary statistics" effect may operate.

The summary construct view maintains that consumers record and abstract individual elements of information into higher order units or "chunks" (Simon, 1974). The process of information chunking may evolve around brand name. In other words, brand image can contains much product information as a summary construct (Jacoby, Olsen, and Haddock, 1971). Consumers may abstract information about a country's products because brands with identical country of origin have very similar product attributes.

Roth and Romeo (1992) noted that past country of origin research has often treated country quality as a summary construct, rather than as a defined set of dimensions from which quality is inferred (e.g., Hong and Wyer, 1989). In fact, country image may be the more appropriate summary construct, of which perceived quality may be just one dimension. Han (1989) demonstrated that when consumers are not familiar with a

country's product, a summary construct model operates in which consumers infer product information into country image, which then influences brand attitude.

Han (1989) summarised summary functions of country image as abstractions of product information into country image, in contrast to inferences implied by the halo function, and direct effects of country image on consumer attitude toward a brand from the country instead of affecting it indirectly through product attribute rating.

2.4 Constructs of Product-Country Images

Consumers evaluate products and countries based on various attributes, but when they do not know much about a product or a country, their evaluations may rely on substitute or surrogate indicators; for example, economical or political attributes as country image dimensions and quality attributes as product image dimensions.

There is a lack of agreement about country image dimensions. In order to operationalise country image definitions, it is necessary to determine the relevant underlying dimensions of these constructs. Country image has been consistently identified as a multi-dimensional concept. (e.g., Jaffe and Nebenzahl, 1984; Johansson and Moinpour, 1977; Han, 1989). Several analytic and multi-dimensional scaling studies have indirectly implied some dimensions of country image across various countries (Johansson and Moinpour, 1977, Johansson et al., 1985).

As a result of literature review on country image, Martin and Eroglu (1993) identified that there are four dimensions used to define the construct's domain of country image; (1) political, (2) economic, (3) technological, and (4) social desirability. The first three dimensions are self-explanatory and the fourth dimension, social desirability, includes such factors as quality of life, standard of living, and level of urbanisation. Interestingly, the literature did not indicate culture of cultural familiarity as an underlying dimension of the country image construct.

To examine the effects of country of origin, Han and Terpstra (1988) assessed the association between five image dimensions (technical advancedness, prestige, workmanship, service, and economy) and two categories (automobiles and televisions). They found that country image ratings are not consistent across the five dimensions (e.g., German autos are rated high on prestige, but low on economy). This suggests that country image is specific to the dimensions being measured. They also found that country image ratings tend to be consistent across product categories (e.g., both Japanese autos and televisions have moderate levels of prestige). Since country images on specific product dimensions appear to be generalisable across product categories, Han and Terpstra (1988) concluded that general country images may exist.

Roth and Romeo (1992) identified four country image dimensions which are *Innovativeness, Design, Prestige*, and *Workmanship*. These dimensions, being selected based on three criteria : (1) were consistently found in previous research; (2) related to perceptions of a country's production and marketing strengths and weaknesses; and (3) either intuitively and/or based on previous research, are applicable to a broad range of product categories. Finally, they defined the country image dimensions as:

Innovativeness; Use of new technology and engineering advances
Design; Appearance, style, colours, variety
Prestige; Exclusivity, status, brand name reputation
Workmanship; Reliability, durability, craftsmanship, manufacturing quality.

Consumers use various information "cues" or characteristics of products in their product evaluations (Peter and Olson, 1987; Schellinck, 1989). Product cues are classified as either "intrinsic" (involving the physical attributes of a product), or "extrinsic" (product-related information not part of the physical product itself, such as brand name, price, and country of manufacture; Olson and Jacoby, 1972).

Common extrinsic attributes include brand name, price, level of advertising, product warranty, retail store image and country of origin. By definition, extrinsic attributes are

outside the product. These cues serve as an index or surrogate of the overall evaluation and presumably are based upon a belief, held by the consumer, that a reliable association exists between the cue and the overall evaluation.

One important impression to the consumer is the product's (or brand's) quality. Cues relevant to forming impressions of quality include (a) price; (b) product composition characteristics such as taste, aroma, colour style, and size; (c) packaging; (d) brand, manufacturer (i.e., corporate), and store image; (e) advertising; (f) word-of-mouth reports; and (g) past purchase experience (Jacoby, et al., 1971).

The majority of country image and country of origin studies have been concerned with consumers' overall quality evaluations of products, and they have frequently measured overall product quality through a single-item scale (Li, Dant and Wortzel 1995). Those studies were trying to identify and measure dimensions of product quality. For example, Erickson, Johansson, and Chao (1984) have operationalised four quality dimensions: reliability, durability, workmanship, and price. Similarly, Cattin, Jolibert, and Lohnes (1982) have measured five quality dimensions: reliability, pricing, workmanship, technicality, performance.

As an influential country of origin study, Nagashima (1970,1977) identified six quality dimensions: price/value, service, engineering, advertising, reputation, and design/style. Garvin (1984) has proposed a taxonomy of product quality composed of eight dimensions: performance, features, reliability, durability, conformance, serviceability, aesthetics, and image. Li et al. (1995) argue that though his taxonomy is more comprehensive and its dimensions are more clearly defined, it has not been operationalised and empirically confined.

Li, Dant, and Wortzel (1995) argue that country of origin researchers have not clearly distinguished value and price from the notion of quality, and have considered value and/or price as one dimension of product quality. Nonetheless, price, value and quality are distinct constructs (Garvin, 1984; Zeithaml, 1988). They have also claimed that the quality dimensions are often overlapping with one another and are not well defined.

2.5 Methodology

Han, Lee, and Ro (1994) argue that although numerous studies have been conducted on country image, unfortunately, the survey methodologies of these studies have never been questioned. They also note that although the choice of an appropriate survey mode has been investigated in depth and reported in marketing and behavioural literature (e.g., Maynes, 1965; Sudman et al., 1965), these country image studies contain little or no discussion on the appropriateness of their survey methodology.

As noted by Martin and Eroglu (1993), from a theoretical standpoint researchers in the area of country image effects have become increasingly sensitive to its theoretical and methodological issues (e.g., Bilkey and Nes, 1982; Jaffe and Nebenzahl, 1984, 1993; Parameswaran and Yaprak, 1987). The literature survey by Martin and Eroglu (1993) indicates that there is no validated scale for measuring country image per se. Davis, Douglas and Silk (1981) also made a criticism on the shortage of valid and reliable measuring instruments for the country image study.

Bilkey and Nes (1982) argue that all of country image studies may not be valid, although country of origin did influence product evaluations, because of the following methodological limitations. First, most of the studies involved only a single cue; that is, country of origin was the only information on which respondents based their evaluations. A single cue study is bound to yield a significant cue effect that might or might not exist in the real world. Second, in much of that research the respondents were given only verbal references to products, rather than shown a tangible product.

Nebenzahl and Jaffe (1993) argue that the "country image effect" construct assumes that country image affects consumers' perception of product attributes made in the surveyed countries. To the degree that the observed differences result from true mean differences among corresponding products, they reflect reality and not the country image effect. Therefore, studies utilising mean ratings alone may provide valid measures of how

consumers perceive products made in different countries, but not necessarily country image effects (i.e., Jaffe and Nebenzahl, 1988).

2.5.1 Biases in Country Image Study

The presence of an origin bias in product evaluations was established in the first generation of "made-in" studies (e.g., Reierson, 1966; Anderson and Cunningham, 1972; Nagashima, 1977). One's country image can develop as a result of a direct experience with the country, such as travelling to the country. Alternatively, it can be influenced by outside sources of information, such as advertising or word of mouth communications. Last, it could be affected by inferences (correct or incorrect) based on past experience such as opinions gained from using products originating in that particular country (Martin and Eroglu, 1993). The "made in" image is naturally affected by the familiarity and availability of the country's product, and the stereotype of that country. Some representative products of the country influence the total product image (Nagashima, 1970). Halfhill (1980) confirmed that while consumers had preconceived notions about foreign products, these *attitudes were really national stereotypes rather than opinions* about specific products.

Bias manifests itself in a variety of ways. It can be country-specific, whereby the consumer displays a consistent like or dislike for all products from that country (Reierson, 1966, 1967; Etzel and Walker, 1974; Kaynak and Cavusgil, 1983) or it can be product-specific, where a particular country may rank high for one product class (e.g., German beer) and lower for another (Darling, 1981; Dornoff, Tankersley and White, 1974; Gaedeke, 1973). A number of studies (e.g., Bilkey and Nes, 1982; Chasin and Jaffe, 1979; Gaedeke, 1973; Han, 1988; Nagashima, 1970, 1977; Reierson, 1966) suggest a strong tendency for consumers in more developed countries to evaluate their own products more favourably that do foreigners.

For example, Daring and Kraft (1977) found that Finnish consumers rated domestic products significantly higher than foreign goods, in spite of the fact that most of the foreign origins in the study were major trading nations with dominant positions in world markets. They noted that "the extremely strong relative position of Finnish product is understandable, of course, in the light of the intense national loyalty and pride of the Finnish people" (p.529). Otherwise, according to Li and Monroe (1992), differences in perceived product quality between developed countries (DC) and Newly Industrialising Countries (NIC) are due to consumer beliefs that DC's workers are more technologically sophisticated than NIC's workers and consequently more able to make quality products.

Since Schooler's (1965) seminal study, evidence from most studies generally supports the existence of country of origin effects. Consumers express preferences for products from some countries over those of other countries. Those origin preferences may be product-dependent (Etzel and Walker, 1974; Kaynak and Cavusgil, 1983), hierarchical by country (Schooler, 1971), reflect a positive home country bias compared to similar countries (Chao, 1989; Schooler, 1965), or reflect a negative home-country bias, if the home country is less developed than alternative sources (Tan and Farley, 1987).

Other studies suggest a strong tendency for consumers in more developed countries to evaluate their own products more favourably than do foreigners (Bannister and Saunders, 1978; Bilkey and Nes, 1982; Lillis and Narayana, 1974; Nagashima, 1970, 1977). These preferences apply to industrial buyers as well (Cattin, Jolibert and Lohnes, 1982; Nagashima, 1970,1977). Generally, it has been established that products made in different, more developed countries are not all evaluated equally (Lillis and Narayana, 1974; Schooler, 1965, 1971). Further it is suggested that a systematic bias exists since there is a positive correlation between product evaluation and the level of economic development of the country of origin (Elliott and Cameron, 1994).

The study by Han, Lee, and Ro (1994) found significant interactions between the survey mode and products' country of origin. Specifically, their study examined six patterns of response variations across survey modes implied by social desirability biases, demand artifacts, and haloing biases (pp.153-154).

2.5.1.1 Social Desirability Biases

As Han et al (1994) noted, if social desirability biases cause response variations across survey modes, subjects would rate surveyor's national products more favourably in personal and telephone interviews than they would in self-administered surveys. In addition, because social desirability biases would systematically affect subjects' ratings of product attributes, and purchase intentions, statistical relationships among these variables would be systematically overestimated. As a result, the relationships would be stronger in personal and telephone interviews than they would in self-administered surveys.

Concurrently, social desirability biases would result in stronger associations among multiple items for attribute ratings when personal interviews and, to a lesser degree, telephone interviews are used than when self-administered surveys are used. However, the occurrence of social desirability biases may be selective. In other words, social desirability biases may be more likely to occur when subjects evaluate products that elicit strong patriotic emotions (e.g., automobiles).

2.5.1.2 Demand Artifacts

Demand artifacts occur when the subject distorts his responses in a direction to fulfil the researchers' expectations. This systematic response error would drive up relationships among multiple response items; thus, very strong relationships among the items would be expected. Because demand artifacts are most likely to occur in personal interviews, telephone interviews, and self-administered surveys in the descending order, statistical relationships among multiple response items would be strongest in personal interviews and weakest in self-administered surveys (Han et al., 1994).

2.5.1.3 Haloing Biases

Haloing biases would produce strong and consistent relationships among multiple response items because they systematically affect all response items. If haloing biases are a major source of response variations across survey modes, self-administered surveys

would exhibit the strongest and the most consistent relationships among multiple response items; telephone interviews, the second strongest; and personal interviews, the weakest (Han et al., 1994).

2.5.2 Sampling

The majority of previous studies on country image have used self-administered surveys with convenience samples of either students or certain segments of consumers (Han, Lee, and Ro, 1994). Wall and Heslop (1986) and Papadopoulos, Heslop, and Bamossy (1990) have complained of the "almost universal use of atypical populations," such as students or small consumer samples selected in a non-random, non-representative basis.

Using a US consumer sample, Han et al. (1994) found significant differences in country of origin effects as a function of the data collection mode used in the research (personal interview, telephone, self-administered survey). It appeared that the data collection mode affected social desirability bias, demand characteristics, or involvement to yield differing responses. Wall and Heslop's (1986) findings demonstrate the need for gathering demographic data to better understand the impact of country of origin information on consumers' product evaluations.

Johansson (1993) notes that when the country of origin effect is inferred from estimated relationships between variables, the use of convenience samples is not a very serious drawback. Even if the levels of attitude items and preferences are not typical of the population at large, the correlation between them may well be valid and accurate for the larger population.

As Liefeld (1990) shows, the use of student samples really is not an important. Most of big and important studies do work with samples from real-life populations (i.e., Darling, 1987; Lumpkin, Crawford, and Kim, 1985; Papadopoulos, Heslop, and Bamossy, 1990; Schooler, 1971). Perusal of previous product-country images research (see Table 2.3)

shows sample size ranging from 43 (i.e., Haakanson and Wootz, 1975) to 2,220 (i.e., Papadopoulos, Heslop and Bamossy, 1990).

2.5.3 Questionnaire

It is difficult to assess the extent and nature of country of image impact on product evaluations without an accurate instrument to measure it. The critical first step in the development of the scale is to specify the domain of the construct of country image. This involves a comprehensive review of the literature related to country of origin as well as country images (e.g., Baughn and Yaprak, 1991; Bilkey and Nes, 1982; Cattin et al., 1982; Gaedeke, 1973; Halfhill, 1980; Han, 1989; Han and Terpstra, 1988; Hong and Wyer, 1989; Johansson et al., 1985; Johansson and Moinpour, 1977; Nagashima, 1970;1977; Narayana, 1981; Parameswaran and Yaprak, 1987).

As Webb (1992) noted, it is not possible to write a prescription that will guarantee a perfect questionnaire. Good questionnaires, on the other hand, can be designed and good questionnaires are those that validly fulfil the objectives of the research with the minimum invasion of error and bias. Questionnaires may be used in a variety of contexts in survey research: in mail surveys, telephone interviews, formal, structured interviews, and also, but to a lesser extent, in self-administered and group-administered questionnaires.

Questionnaire construction is of critical importance. Tull and Hawkins (1993) note that, ultimately, a sound questionnaire requires applying applicable principles, common sense, concern for the respondent, a clear concept of the needed information, and thorough protest. Questionnaire construction involves seven major decision areas: (1) preliminary considerations, (2) question content, (3) question wording, (4) response format, (5) question sequence, (6) physical characteristics of the questionnaire, and (7) pre-test. There are three initial considerations that need to be answered when starting out on the construction of a questionnaire: the type of information that is required, the type/nature

of the respondents who are to be surveyed, and the type(s) of method by which the survey is to be administered (Webb, 1992).

Survey questionnaires are to administered to the subjects. From a theoretical standpoint researchers in the area of country image effects have become increasingly sensitive to its theoretical and methodological dimensions. Although Martin and Eroglu (1993) argued that there is no validated scale for measuring country image per se., the Nagashima scale[2] is widely quoted and utilised in studies of product-country images (e.g., Cattin, Jolibert and Lohnes, 1982; Han, 1989; Han and Terpstra, 1988; Jaffe and Nebenzahl, 1984; Lillis and Narayana, 1974; Martin and Eroglu, 1992; Narayana, 1981; White, 1979).

Most recently, however, it has been criticised by Martin and Eroglu (1992) for using items that may also capture country image (i.e., technically advanced/technically backward). Kamins and Nagashima (1993) noted that Nagashima discounted this criticism by claiming that "although one could easily characterise a country as being technically advanced or technically backward, subjects asked to complete my scale are given instructions that the attributes relate specifically to their perception of products made in a given country and not their perception of a country."

Jaffe and Nebenzahl (1984) found that the set of scales used by Nagashima (1970,1977) do not provide the same dimensions originally assumed by that author and in subsequent studies replicating his scale items. They suggest that work is necessary to find better scales for measuring country image. Furthermore, Martin and Eroglu (1993) noted two questionable reasons.

First, from a conceptual perspective most of the scales presently used do not clearly distinguish between the image objects; that is, whether it is country image or product image that is being measured. The widely used Nagashima (1970, 1977) scale is a case in point. The scale that is designed to measure the image of products with a foreign country of origin includes items that also may capture country image.

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[2] 7-point 29-item Country Image Scale and 7-point 20-item Product Image Scale.

A valid scale, however, requires a precise delineation of the construct's domain. If product attitudes are of interest, then the final scale should reflect measurement of product-specific attributes (e.g., reliable/unreliable, expensive/inexpensive). If, on the other hand, country image is being measured, the scale items should capture country-relevant attributes (e.g., technically advanced/ technically backward, cosmopolitan/ ethnocentric). An accurate scale of country image needs to clearly specify the construct's domain and to be exact concerning what is included as well as what is excluded from the definition.

The second issue concerns the low reliability ratings of the existing scales used in country image studies. Several researchers reported poor reliability in their efforts to validate some of the popular scales used in country of origin research (e.g., Narayana, 1981, Cattin et al., 1982). Their findings were supported by Jaffe and Nebenzahl (1984) who concluded that existing image scales not only have low reliability but also are not tested for internal consistency and stability (Martin and Eroglu, 1993).

Jaffe and Nebenzahl (1984) insisted that if two image studies have different questionnaire format, a comparison of the results may not be valid because of the difference in the format structures. Most image studies have employed a semantic differential or Likert-type scale, but the questionnaires have taken two different forms.[3] In one format, respondents rate each object (store, product, or country) separately on the basis of given descriptors. After rating the first object, the respondent repeats the procedure for the next object and so on until all objects have been rated on the same set of descriptors. This type of questionnaire (e.g., Chasin and Jaffe, 1979; Darling and Kraft, 1977; Halfhill, 1980) is labelled Q1 in Table 2.1.

In the second questionnaire format, labelled Q2, respondents rate all objects simultaneously according to a descriptor. This procedure is repeated until the set of objects has been rated for all descriptors. Studies of country image that employed this questionnaire format include those of Bannister and Saunders (1978), Nagashima (1970, 1977), and Reierson (1966, 1967).

[3] Another alternative format is the graphic positioning scale.

As both alternative formats have been used in country image studies and their measurements compared, it is tacitly assumed that the questionnaires are equivalent. Thus, Jaffe and Nebenzahl (1984) tested whether the two questionnaire format are indeed equivalent.

Table 2.1

Alternative Questionnaire Formats for Comparative Image Study Using a Semantic Differential Scale (Jaffe & Nebenzahl, 1984)

Q1	Q2
Great Britain Expensive ------- Inexpensive Reliable ------- Unreliable Exclusive ------- Common : : Inventive ------- Imitative Israel Expensive ------- Inexpensive Reliable ------- Unreliable Exclusive ------- Common : : Inventive ------- Imitative : United States Expensive ------- Inexpensive Reliable ------- Unreliable Exclusive ------- Common : : Inventive ------- Imitative	Expensive ------- Inexpensive Great Britain ------- Israel ------- Japan ------- : United States ------- Reliable ------- Unreliable Great Britain ------- Israel ------- Japan ------- : United States ------- Exclusive ------- Common Great Britain ------- Israel ------- Japan ------- : United States ------- : : Inventive ------- Imitative Great Britain ------- Israel ------- Japan ------- : United States -------

2.5.4 Measurement and Scales

In designing image studies of products and countries, an appropriated scale and instrument to measure and record attitudes should be selected. The choice of an appropriated scale has been investigated in depth and reported in the marketing and behavioural literature (e.g., Hawkins, Albaum, and Best, 1974; Churchill, Jr., 1977; Peter and Churchill, Jr., 1986; Hughes, 1967).

Measurement is the assignment of numerals or numbers to objects, events, or variables according to rules. Rules are the most significant component of the measurement procedure because they determine the quality of measurement (Frankfort-Nachmias and Nachmias, 1996). Martin and Eroglu (1993) argue that there is no validated scale for measuring country image. As Tull and Hawkins (1993, p.298) noted, measurement may be defined as the assignment of numbers to characteristics of objects, persons, states, or events, according to rules. What is measured is not the object, person, state, or event itself but some characteristic of it. When objects are counted, for example, we do not measure the object itself but only its characteristic of being present.

Furthermore, Martin and Eroglu (1993) claim that scales for country image study seem questionable for two reasons. First, from a conceptual perspective most of the scales do not clearly distinguish between the image objectives; that is, whether it is country image or product image that is being measured. The widely used Nagashima (1970, 1977) scale is a case in point. The second issue concerns the low reliability ratings of the existing scales used in country image studies. They criticised that several researchers reported poor reliability in their efforts to validate some of the popular scales used in country of origin research (e.g., Narayana, 1981; Cattin, Jolibert, and Lohnes, 1982).

It is useful to distinguish four different types of numbers or levels of measurement[4]: *nominal, ordinal, interval,* and *ratio*. The lowest level of measurement is the nominal

[4] The term *scales* is sometimes used instead of *levels of measurement*. A scale may be thought of as a tool for measuring; a speedometer is a scale, as is a ruler or a questionnaire (Frankfort-Nachmias and Nachmias, 1996, p.158). A distinction between nominal, ordinal, and interval/ratio scales or levels of measurement was developed by Stevens (1946).

(sometimes called *categorical*) levels. Nominal levels entail the classification of individuals in terms of a concept. These levels are comprised of numbers used to categorise objects or events. A nominally scaled number serves only as a label for a class or category. Ordinal levels represent numbers, letters, or other symbols used to rank items. Items can be categorised/ordered not only as to whether they share some characteristic with another item but also whether they have more or less of this characteristic than some other object. However, ordinary scaled numbers do not provide information on how much more or less of the characteristic various items possess.

Interval levels represent numbers used to rank items such that numerically equal distances on the scale represent equal distances in the property being measured. However, the location of the zero point is not fixed. Ratio levels consist of numbers that rank items such that numerically equal distances on the scale represent equal distances in the property being measured and have a meaningful zero. A ratio level of measurement is achieved only when it is possible to attain all four of these relations: (a) equivalence, (b) greater than, (c) known distance of any two intervals, and (d) a true zero point. Interval/ratio levels are recognised to be the highest level of measurement because there is more that can be said about them than with the other two types. Moreover, a wider variety of statistical tests and procedures is available to interval/ratio levels (Bryman and Cramer, 1990). Table 2.2 summarises some of the more important features of measurement scales.

The increasing use of data analytic techniques capable of capturing the interrelationships among origin country and other extrinsic cues, affect, attribute evaluations, and outcomes has added to the richness of this research area (e.g., Johansson and Nebenzahl, 1986; Johansson, Douglas, and Nonaka, 1985). A valuable addition to this stream of research has been provided by the inclusion of "true" levels of product attributes (such as gas mileage) based on published sources (Erickson, Johansson, and Chao, 1984; Johansson, Douglas, and Nonaka, 1985). This allows examination of the impact of "true scores" on attribute beliefs and country image effects, and a comparison of beliefs regarding product attributes with independent measures based on product trial.

Table 2.2

Scales of Measurement

(Churchill. Jr.. 1995. p.415)

Scales	Basic Comparisons*	Typical Examples	Measures of Average**
Nominal	Identify	Mail-female	Mode
		User-nonuser	
		Occupations	
		Uniform numbers	
Ordinal	Order	Preference for brands	Median
		Social class	
		Hardness of minerals	
		Graded quality of lumber	
Interval	Comparison of intervals	Temperature scale	Mean
		Grade point average	
		Attitude toward brands	
Ratio	Comparison of absolute magnitudes	Units sold	Geometric mean
		Number of purchasers	Harmonic mean
		Probability of purchase	
		Weight	

* All the comparisons applicable to a given scale are permissible with all scales below it in the table. For example, the ratio scale allows the comparison of intervals and the investigation of order and identify, in addition to the comparison of absolute magnitudes

** The measures of average applicable to a given scale are also appropriate for all scales below it in the table; that is, the mode is also a meaningful measure of the average when measurement is on an ordinal, interval or ratio scale.

Social scientists employ scales for several reasons. First, they enables researchers to represent several variables by a single score that reduces the difficulties of dealing with complex data. Second, scales provide quantitative measures that are amenable to more precise statistical manipulation. Finally, scales increase the reliability of measurement. A score on a scale is considered a more reliable indicator of the property being measured than is a measure based on a response to a single question or item (Frankfort-Nachmias and Nachmias, 1996).

Three unique forms of the itemised rating scale are commonly used to construct attitude scales in applied marketing research studies. These are known as Likert scales, semantic differential scales and the Stapel scales (Webb, 1992).

The Likert scales, sometimes referred to as a summated scale, require that respondents indicate their degree of agreement or disagreement with a series of statements which are associated with the attitude under investigation. Their responses are given a numerical value and/or a sign which reflects the strength and the direction of the respondents' attitude to each of the statements; thus respondents who agree with a statement will be marked positively or with a high mark and those who disagree with a negative or low mark. Like the semantic differential and Stapel scales, Likert scales can be analysed on an item-by-item basis (profile analysis), or they can be summed to form a single score for each individual (Tull and Hawkins, 1993).

The Semantic Differential scales are probably the most widely used measures of attitude, especially for brand and corporate image investigations. Respondents have to indicate the position of their attitude towards the object on an itemised seven-point scale. This enables the researcher to evaluate both the direction and intensity of the respondent's attitude towards the object. The extremities of the scale are secured by a pair of polarised adjectives, statements, or phrases. Semantic differential data can be analysed in a number of ways. The versatility is increased by the widely accepted assumption that the resultant data are interval in nature. Two general approaches to analysis are aggregate analysis and profile analysis.

The Stapel scale is a modified version of the semantic differential scale and uses a unipolar, 10-point non-verbal rating scale with values which range from +5 to -5. The scale thus measures both the direction and the intensity of an attitude simultaneously. The Stapel scale differs from the semantic differential scale in that it measures how well only one adjective, phrase etc., fits the object being evaluated. The advantages of this technique lie in the ease of administration and the absence of any need to pre-test the adjectives of phrases to ensure true bipolarity.

2.6 Theoretical Models

While country image has been the subject of numerous research studies (i.e., Bilkey and Nes, 1982) much of those research is descriptive in nature. Only recently theoretical models have been proposed to explain the role of country image in product evaluations (Han, 1989; Johansson, 1989; Obermiller and Spangenberg, 1989[5]). Hadjimarcou and Marks (1994) argue that very little empirical research has been done to test these proposed models.

Johansson, Douglas, and Nonaka (1985) present a conceptual model linking country of origin both to consumer evaluations of specific beliefs about product attributes as well as to overall attitude (affect) regarding the product. Their model also incorporates a reciprocal link from affect back to beliefs about product attributes (halo effect), suggesting that beliefs are also influenced by overall evaluations.

Roth and Romeo (1992) strongly argued that few studies have systematically examined what underlies a consistent or favourable match between products and countries. They examined how consumers perceive products emanating from a particular country. Roth and Romeo (1992) suggest a framework which matches the importance of product category dimensions with perceived image of the country of origin along the same dimensions. Figure 2.1[6] shows when product and country matches and mismatches

[5] They proposed using Bettman's (1979) information processing framework to examine such country of origin effects. The proposed framework contains three major processing routes: cognitive, affective, and normative (see Hadjimarcou and Marks, 1994, for a review).

[6] Roth and Romeo (1992) have some examples of consumer product and country perceptions regarding the image dimensions of design and prestige. First, France may be associated with good design and prestige, while Hungary is perceived as very weak with regard to design and prestige. Further, design and prestige may be important features when consumers consider shoe purchases, but relatively unimportant for the purchase of beer. A product-country match (cell I of Figure 1) would occur when the perceived strengths of a country are important product features or benefits for the particular product category. Hence, a product-country match for French shoes would be evident. An unfavourable product-country match (cell II) would occur when the important product features are not the perceived strengths of the country. Hungarian shoes would appear to be an unfavourable match. A favourable mismatch (cell III) would occur when the image dimensions for a country are positive, but they are not important for the particular product category. Such would be the case for French beer. Likewise, an unfavourable mismatch (cell IV) would occur when an image dimension is both an unimportant product feature and not a perceived strength of the country. Hungarian beer would likely be an unfavourable mismatch (see Roth and Romeo, 1992, for the findings).

should occur. A product-country match should occur when important dimensions for a product category are also associated with a country's image. When there is no such linkage, a mismatch between the product category and country should exist.

Figure 2.1
Country and Product Category Dimension
Matches and Mismatches (by Roth & Romeo. 1992)

		COUNTRY IMAGE DIMENSIONS	
		Positive	**Negative**
DIMENSIONS AS PRODUCT FEATURES	**Important**	**I** Favorable match	**II** Unfavorable Match
	Not Important	**III** Favorable Mismatch	**IV** Unfavorable Mismatch

The four cells in Figure 2.1 illustrate possible relationships between consumer product and country perceptions.

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2.6.1 Belief-Attitude Models

The images of foreign nations held by people are made up of cognitive (perceived characteristics of the nations), affective (a like or dislike of them) and behavioural (a set of actions or behaviour towards them which the individual sees as appropriate) components (Scott, 1965). Erickson, Johansson, and Chao (1984) based their observations of the formulation of stereotypical images on the "belief-attitude relationship." Their findings also show that inferred beliefs about one attribute influence other attribute beliefs.

There are three fundamental belief types: descriptive, inferential, and informational. Descriptive beliefs derive from direct experience with the product. Informational beliefs are those influenced by outside sources of information such as advertising, friends, relatives and so on. Inferential beliefs are formed by making deductions (rightly or wrongly) based on past episodes that relate to the current stimulus (Fishbein and Ajzen, 1975).

Etzel and Walker (1974) study the degree of congruence between general national product stereotypes and attitudes toward specific products. They found a significant difference between general country attitudes and specific product attitudes by country of source. They concluded that it might be misleading to base advertising on general national product attitudes, because specific product attitudes are more relevant. Such differences[7] between general national product attitudes and more specific product attitudes have been demonstrated or indicated also by Gaedeke (1973), Reierson (1966), and Nagashima (1970, 1977).

Although country of origin does not determine physical or performance characteristics, it does influence consumers' belief and attitude structures about products. Erickson, Johansson and Chao (1984) note that product attribute beliefs can influence as well as be influenced by attitude toward the product, and the role of country of origin is to affect attitude indirectly through beliefs.

Fishbein and Ajzen (1975) define an attitude as "... a learned predisposition to respond in a consistently favourable or unfavourable manner with respect to a given object". Probably the most familiar model linking beliefs and attitudes is the Fishbein model, in which attitude is determined by beliefs. According to Fishbein's (1963, p.233) model, it may essentially be stated as follows: (1) an individual holds many beliefs about any given object, i.e. many different characteristics, attributes, values, goals, and objects are

[7] Differences as three levels: Perceptions of all foreign products. national product stereotypes. i.e.. all products made in Germany. and a specific type of product made in a specific country. i.e.. German automobiles.

positively or negatively associated with a given object; (2) associated with each of these 'related objects' is a mediating evaluative response, i.e. an attitude; (3) these evaluative responses summate; (4) through the mediation process, the summated evaluative response is associated with the attitude object, and thus (5) on future occasions the attitude object will elicit this summated evaluative response, i.e. this attitude. Fishbein's theory implies that an individual's attitude toward any object is a function of his/her beliefs about the object (i.e. the probability that the object is associated with other objects, concepts, values, or goals) and the evaluative aspect of those beliefs (i.e. the attitude toward the 'related object'). The model is represented by

$$Ao = \sum_{i=1}^{n} (Bi\ ai)$$

where Ao = an individual's attitude toward the object
Bi = belief 'i' about the object
ai = evaluative aspect of Bi
n = the number of beliefs

Bass and Talarzyk (1972, p.93) extended Fishbein's belief-attitude model to comparison of individuals' preference ordering of brands. The model indicates the consumer's attitude toward the product which is the sum of beliefs about product attributes weighted by the importance of each attribute. The model is represented by

$$Ab = \sum_{i=1}^{N} (Wi\ Bib)$$

where Ab = Attitude toward a particular brand b
Wi = the weight or importance of attribute i
Bib = the evaluative aspect or belief toward attribute i for brand b
N = the number of attributes important in the selection of a given brand in the given product category.

The empirical results of Beckwith and Lehmann (1975) and Holbrook (1983) show that beliefs may indeed influence attitude. These studies also show that attitude can have a halo effect on at least some beliefs. This empirical evidence suggests the need for simultaneous models in empirical research involving attitudes and beliefs - not models in which influence is directed only one way.[8] Hence, the model must be expanded from a single overall evaluation equation into a system of equations in which the effect of the overall rating on each belief is taken into consideration (Johansson, Douglas, and Nonaka, 1985).

The basic conceptual model has been applied to examine the impact of "image" variables, and specifically country of origin, on product evaluations (Erickson et al., 1984). Johansson et al. (1985) extended the basic model into a more complex formulation to examine the impact of nationality and other demographic variables of respondents.

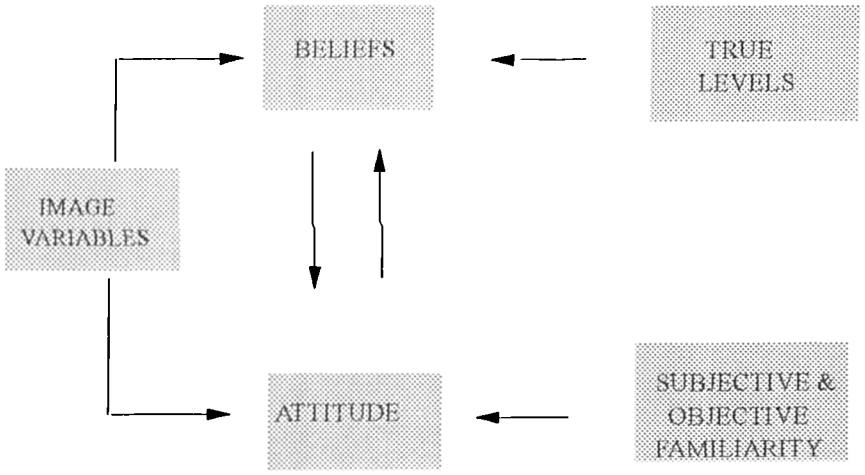
Erickson, Johansson, and Chao's (1984) model is related to country of origin image (country image) and attitude toward the product. They note that product attribute beliefs can influence, as well as be influenced, by attitude toward the product, and the role of country of origin is to affect attitude indirectly through beliefs However, they also detect a significant and direct impact of country of origin on product attribute beliefs which include product quality perceptions. The model is presented in Figure 2.2

On testing the model, Erickson, Johansson, and Chao (1984) found that the image variable, country-of-origin, appeared to have direct effects on beliefs and not on attitudes. They did not find sufficient evidence to propose that the "true levels" of a component of the product or "familiarity" with the product had a strong effect on the subjects' evaluations. Johansson, Douglas, and Nonaka (1985) expanded Erickson, Johansson, and Chao's (1984) model by including demographics. Their results were consistent with earlier findings. Demographics had no effect on the relationships They

[8] As Zajonc (1980) argued, this may not be the appropriate way to view the relationship The possibility of a halo effect implies that causation could proceed in the other direction-i.e., from attitude to beliefs (i.e., Beckwith and Lehmann, 1975; Holbrook, 1983)

found that nationality of respondents or sex of respondents did not result in any consistent trend or tendency in evaluation of product-country images.

Figure 2. 2
Belief - Attitude Model with Image Effects
by Erickson et al., 1984



Due to the possibility of two-way influence between attitudes and beliefs, a system of simultaneous equations is needed to represent the relationship, including one equation for each attribute in which the belief rating for the level of that attribute is the dependent variable. Attitude is an explanatory variables in each belief equation, and the beliefs are explanatory variables in the attitude equation. Because of the possibility that image variables might affect attitude as well as beliefs, these variables become explanatory variables in each equation in the system.

Two other considerations enter into the development of the model. One is that beliefs about the level of a particular attribute for a product alternative should depend upon the true level for that alternative, the true level having its effect through direct experience or communication. For the product area chosen for study (automobiles), objective values for many of the attributes are available as published information. These objective attribute values are entered as explanatory variable in the belief equations. In this way,

image influences on beliefs can be viewed as biases, since the effects of the true values are controlled for the estimation.

Another consideration is that previous research on the attitude relationship (Matlin, 1971; Zajonc, 1980) indicates that affect is influenced by both subjective familiarity (the subjects think they are familiar with the stimulus) and objective familiarity (actual exposure to the stimulus). Thus two variables representing these effects are included as explanatory variables in the attitude equation: self-assessed familiarity with the alternative, and actual ownership as a measure of objective familiarity.

2.6.2 The Johansson Model

Johansson's (1989) model (see Figure 2.3) identifies two basic determinants of cue utilisation in consumer behaviour. The model is focusing on the customer's propensity to use a product's "made-in" label. Consumers' propensity to use "made-in" labels is determined by two values as determinants of cue. One is predictive value which is defined as "...the extent to which the consumer perceives or believes that the cue is related to or is indicative of product quality (Olson and Jacoby 1972, p.174)". The other is confidence value of the cue which is defined as "...the degree to which a consumer is confident in his ability to accurately perceive and judge that cue (Olson and Jacoby, 1972, p.175)."

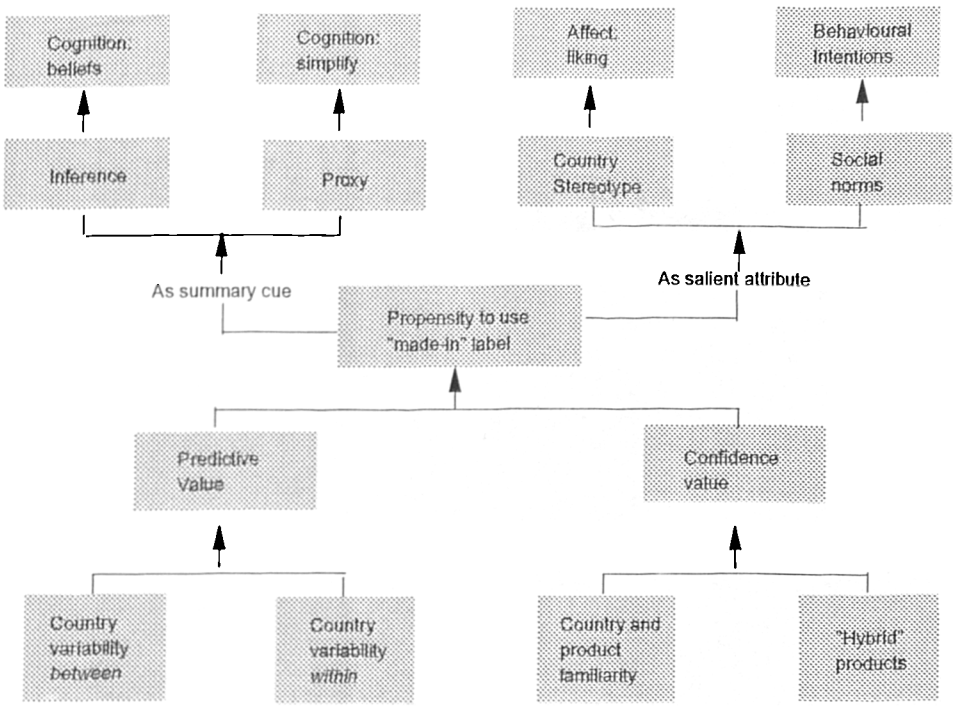
Johansson's (1989) model implies that the predictive value is influenced by perceived difference between products from different countries (variability between countries), and perceived difference between products from a given country (within country variability). High between country variability and low within country variability results in high predictive value. High within country variability and low between country variability results in low predictive value. The model also shows that confidence value is influenced by the country and product familiarity and whether or not the product under consideration is "hybrid".

Consumers are more likely to use country of origin cue when they believe that the cue is related to product quality, and when they are confident in their ability to accurately perceive and judge.

Figure 2.3

Determinants and Effects of the Propensity to Use "Made-in" Labels

(by Johansson, 1989)



The determinants of the country of origin cue utilisation and the predictive and confidence value of the cue depend on the four variables shown above. The "country variability between" refers to the perceived difference between products from different countries in line with the economics of the search behaviour argument. The higher this variability, the more information is contained in the made-in label. "Country variability within" refers to the perceived difference between products from a given country. As this variability increases, the cue's predictive value decreases. Familiarity with a country and

its products is shown to generate increased confidence about using the made-in label as an informative cue.

Heimbach, Johansson and MacLachlan (1989) support Johansson's model. They found product familiarity did increase the confidence value, which in turn resulted in a higher propensity to use country of origin as a relevant cue. Otherwise, a limitation of Johansson's model is the lack of intrinsic and other extrinsic cues. It is unclear how the use of country of origin might be affected by the availability of other information. Generally, country of origin was not found to be very important in product evaluations when appropriate intrinsic product information is provided (Erickson, Johansson and Chao, 1984; Johansson, Douglas and Nonaka, 1985) or under certain conditions when other extrinsic cues were present (Thorelli, Lim and Ye, 1989; Wall, Liefeld and Heslop 1991).

Johansson's model identifies the two values and the four determinants of the use of country of origin cue. Although his framework needs to be tested empirically, it can be seen as an attempt to relate consistently some of the various determinants of the propensity of individuals to judge products by the *country from which they* originate. Eventually, Johansson model may explain some situations but does not address availability of other information.

2.6.3 The Han Models

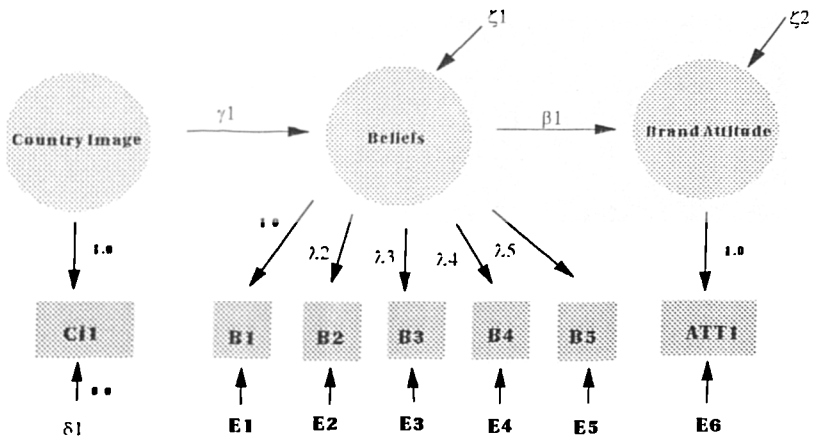
Han (1989) developed the causal model, which is distinctive in the level of image, to test alternative views about the role of country image in production evaluation - the halo and summary construct views. The model points to how the levels of image may be interrelated. Essentially, any higher-level (general) image may function as a halo for understanding objects at a lower hierarchical level, and any lower-level (specific) image may help to create a summary view of the next-up level of abstraction (Papadopoulos, 1993).

2.6.3.1 Halo Construct View

Many previous studies have implicitly or explicitly viewed country image as a halo that consumers use to infer the quality of an unknown foreign brand. This view argues that consumers use country of origin information cue in product evaluation as they are often unable to detect the true quality of a country's product (for example, the image of German engineering helps to enhance the image of such an unrelated product as Lowenbrau beer).

The halo hypothesis has two theoretical implications. First, consumers make inferences about product quality from country image. Second, country image affects consumer rating of product attributes (Chao, 1984; Johansson, Douglas, and Nonaka, 1985). The halo hypothesis suggests the following structural relationships: country image → beliefs → brand attitude (see Figure 2.4).

Figure 2.4
Halo Model (Han, 1989)



In the halo model, country image affects beliefs about tangible product attributes, which in turn affects overall evaluation. This model has been supported (Erickson, Johansson and Chao, 1984; Johansson, Douglas and Nonaka ,1985). Alternatively, Han (1989) demonstrated that when consumers are not familiar with a country's product, a summary construct model operates in which consumers infer product information into country image, which then influences brand attitude. Eventually, the country of origin cue leads

the consumer to greater cognitive elaboration about tangible product traits. This is particularly true when the consumer knows the country of origin in advance of having to make a formal product evaluation (Hong and Wyer, 1989, 1990).

The halo model suggests that consumers use country image to infer quality when the true quality is unknown. Country image becomes a surrogate for quality when product information is lacking (Han, 1989), when there is a lack of familiarity with the product (Monroe, 1976), and when purchase context information is lacking (Belk, 1975). If consumers have a high level of product familiarity, country image will have no significant effect on consumers product evaluations as a halo.

The theoretical implications of the halo model are that consumers make inferences about product quality from country image, and that country image affects consumer rating of product attributes (Erickson, Johansson, and Chao, 1984; Johansson, Douglas, and Nonaka, 1985). This view is consistent with the heuristic hypothesis proposed by Hong and Wyer (1989, 1990).

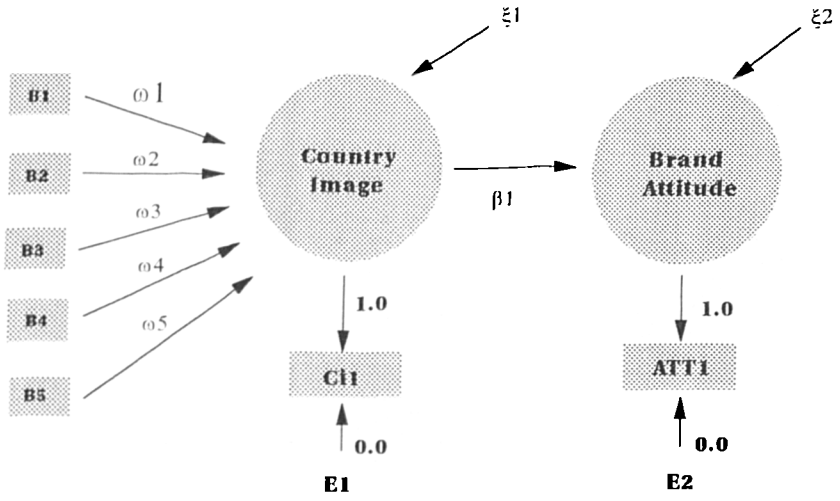
2.6.3.2 Summary Construct View

Theoretical implications of the summary construct view are that consumers make country image as abstraction of product information and that consumer attitude toward a product is affected directly by country image. The summary construct view has two implications. First, consumers make abstractions of product information into country image (for example, German car helps to build the image of Germany), in contrast to inferences implied by the halo hypothesis. Because consumers can construct country-specific information by generalising product-specific information over brands or products from a country.

Second, country image directly affects consumer attitude toward a product or a brand from the country instead of affecting it indirectly through product attribute rating. In the affect referral, a consumer avoids reviewing any attribute data by comparing only previously formed global affective impressions of the options (Wright, 1975). The

summary construct view suggests the following structural relationships: beliefs → country image → brand attitude (see Figure 2.5).

Figure 2.5
Summary Construct Model (Han, 1989)



Han does not suggest that only one of the models represents country image's true role in product evaluation. In fact, product familiarity is said to affect the causal order between country image, beliefs, and brand attitude. His research findings show that under conditions of low product familiarity the halo model has the best goodness of fit. Under this condition, brand attitudes may be indirectly affected by consumers' inferential beliefs. On the other hand, when consumers have a high level of familiarity with the country's products, the summary construct model has a better fit. Under this condition, country image may summarise consumers' beliefs about product attributes and directly affect brand attitudes.

Although Han's views provide valuable insight into how country of origin affects product evaluations, the models do not identify under what conditions country of origin is an important information cue.

2.7 A Summary of Analytic Review

According to empirical and experimental studies undertaken during the last thirty years, country image has a considerable influence on consumers' attitude toward the product. Evidence is found for product-country images and country image effects on products. These research studies can be classified into four groups depending upon whether the studies have been done on consumers or industrial users and whether they involved specific products or not (see Table 2.3 for a review);

in general (Bannister and Saunders, 1978; Cattin, Jolibert and Lohnes, 1982; Darling, 1987; Darling and Kraft, 1977; Darling and Wood, 1990; Dornoff, Tankersley, and White, 1974; Etzel and Walker, 1974; Gaedeke, 1973; Greer, 1971; Halfhill, 1980; Kamins and Nagashima, 1993; Kaynak and Cavusgil, 1983; Lillis and Narayana, 1974; Martin and Eroglu, 1993, Morello, 1984; Nagashima, 1970, 1977; Narayana, 1981; Papadopoulos, Heslop, and Bamossy, 1990; Reierson, 1966, 1967; White, 1979);

in classes of products (Baumgartner and Jolibert, 1978; Chao, 1989; Chasin and Jaffe, 1979; Dornoff, Tankersley, and White, 1974; Etzel and Walker, 1974; Gaedeke, 1973; Hampton, 1977; Kaynak and Cavusgil, 1983; Nagashima, 1970, 1977; Niffenegger, White, and Marmet, 1980; Reierson, 1966);

in specific types of products (Ahmed, d'Astous, and d'Almeida, 1995; Anderson and Cunningham, 1972; Chao, 1993; Cordell, 1992; Chasin and Jaffe, 1979; Du Preez, Diamantopoulos, and Schlegelmilch, 1994; Erickson, Johansson, and Chao, 1984; Gaedeke, 1973; Haakanson and Wootz, 1975; Halfhill, 1980; Han, 1989; Hong and Wyer, 1989; Johansson, Douglas, and Nonaka, 1985; Johansson and Nebenzahl, 1986; Johansson and Thorelli, 1985; Lee and Sirgy, 1995; Li, Dant, and Wortzel, 1995; Lumpkin, Crawford, and Kim, 1985; Niffenegger, White, and Marmet, 1980; Parameswaran and Yaprak, 1987; Reierson, 1966, 1967; Roth and Romeo, 1992; Schooler, 1965, 1971; Schooler and Sunoo, 1969; Schooler and Wildt, 1968; White and Cundiff, 1978); and

Table 2.3
Analytic Review of Selected Previous Studies on Product-Country Images

(a)

Year	1965	1966	1967	1968
Author(s)	Schooler	Reierson	Reierson	Schooler & Wildt
Subjects	students	students	students	students
Products	juice & fabric sample	general + classes of products + 26 specific products	general + specific	2 pieces of identical glassware
Consuming Country(ies)	Guatemala	US	US	US
Source Countries	Guatemala. El Salvador. Costa Rica. Mexico(*fictitious country of origin labels*)	US. Japan. Germany. Italy. France. England. Belgium. Canada. Sweden. Denmark	Italy, Japan	US . Japan
Measure of Evaluation	preconceptions of products characteristics based on subjects' national origin.	Stereotyped perceptions of quality (three manipulations)	subjects' attitude change after being exposed to the different media	purchase preference. Elasticity of product bias
Mode of Data Collection	self-administered questionnaire	self- administered questionnaire	self- administered questionnaire	self- administered questionnaire
Sampling Method	convenience	convenience	convenience	convenience
Product Attributes and /or Country Image Dimensions	product bias and predilections	quality levels	country and store: media influence: film. magazine. publication. window display	country. price 8-item quality score
a)[9] T or I, b)[10] E or A, c)[11] S or M	T E M	I A S	I E S	T E M
Sample	200	155	1.000	236
Analysis Method and/ or Scale used	semantic differential scale: Tukey's test & Z test. ANOVA	low-medium-high of 3-point scale. Chi-square criterion	Likert's method: 24 items 5-point s/d scale: Z value	seven-interval scale (+3 to -3): Z test
Relations with Previous research				Reierson (1966)'s country selection
Findings	product bias: significant differences in the evaluations of products. ***The First Study*** on product-country images	clear evidence of national stereotypes related to only broad product attribute. *quality.*	consumers' perceptions are changing. *Ad and promotion* affect country image.	many American consumers are biased some foreign products

[9] a) = Tangible (T) or Intangible (I) products being evaluated.
[10] b) = Experimental design (E) or Attitude survey (A).
[11] c) = Single cue study (S) or Multiple cue study (M).

(b)

Year	1969	1970	1971	1971
Author(s)	Schooler and Sunoo	Nagashima	Schooler	Greer
Subjects	students	businessmen	adults consumer	purchasing executives
Products	fabric and goblet	general and 6 product classes	cloth sample. desk pen and goblet	general
Consuming Country(ies)	US	**US, Japan**	US	UK
Source Countries	Asia, Africa. S. America. W. Europe. (Not specific countries)	US. Germany. England. Japan & other industrialised countries	US India. Germany. Czechoslovakia. Chile. Nigeria. and 6 areas	Australia. Belgium. Canada. France. Holland. Italy. W/Germany USA
Measure of Evaluation	perceived characteristics of the nations	**stereotyped** images on "made-in" products	**bias** phenomena	purchasing officers' perceptions
Mode of Data Collection	self-administered questionnaire	self-administered questionnaire	personal interview	questionnaire
Sampling Method	convenience	convenience	probability	convenience
Product Attributes and /or Country Image Dimensions	4 areas. 2 age groups. quality	6 quality dimensions: price & value. service. engineering. advertising. reputation. design & style.	Made-in Labels: national(6) and regional(6) biases	quality. engineering know-how
a) T or I, b) E or A, c) S or M	T E S	I A S	T & I E M	I E S
Sample	200	170	866	60
Analysis Method and/ or Scale used	semantic differential scale. partially nested analysis of variance	20- item. 7-point scale (+3 to -3)	factorial analysis of variance: least significant difference test **(LSD)**	semantic differential method
Relations with Previous research	Schooler (1965) ***(fictitious region of the world labels)***	Reierson's (1967) finding	Schooler (1965). subsequent research on Schooler and Sunoo (1969)	
Findings	Not evidence bias against the manufactured goods of developing areas labelled gegionally. Country effect	"Made in" concept comparison between USA and Japan . as national and product stereotypes.	the existence of a hierarchy in consumers' perceptions of various countries. Supported by *Reierson's (1967) findings*	significant differences between the older and younger purchasing officers.

(c)

Year	1972	1973	1974	1974
Author(s)	Anderson and Cunningham	Gaedeke	Lillis and Narayana	Dornoff. Tankersley and White
Subjects	adults	students	adults	adults
Products	**automobiles;** Ford. Volkswagen, Toyota, Renault	general + product classes + special brands	general	general + food. fashion. electronic and mechanical products
Consuming Country(ies)	US	US	**US, Japan**	US
Source Countries	US Japan. W/Germany. France	US and 11 developing countries	England. France. US. Japan. Germany	US. Japan. France. W/Germany
Measure of Evaluation	attitude; degree of foreign product preference	opinions about countries. products	**stereotypes.** attitudes toward "made-in" image	perceptions of countries and quality of imports
Mode of Data Collection	self- administered questionnaire	self- administered questionnaire	questionnaire	questionnaire
Sampling Method	convenience	convenience	probability	probability
Product Attributes and /or Country Image Dimensions	7 socio-economic and demographic variables and 4 personality variables	quality	Nagashima's 20 variables	quality: style. construction. cheap imitations. craftsmanship. workmanship. etc.
a) T or I, b) E or A, c) S or M	I A S	I A S	I A S	I A S
Sample	116	*200*	*131*	216
Analysis Method and/ or Scale used	24 items. **Likert's** method. **liner discriminant analysis, F-ratio**	**Likert's** method. 5-point scale	20 pairs of 7-point semantic differential questionnaire	socio-economic analysis
Relations with Previous research		Reierson's (1966) methodology & extended work.	Nagashima's (1970) basic research instrument	revised Reierson's (1966. 1967) **questionnaire**
Findings	The objective variables failed to significantly discriminate foreign product preference. But personality attributes did yield significant discriminators	Significant differences of opinions toward the quality of products from the developing countries.	Existence of perceptual differences across cultures relative to various foreign and national product images. *"Interdisciplinary Perspective"*	Results indicated a *change in perceptions* of imports. Supports *Reierson's (1967) finding*

(d)

Year	1974	1975	1977	1977
Author(s)	Etzel & Walker	Haakanson & Wootz	Darling & Kraft	Nagashima
Subjects	adults	industrial purchaser	students + professionals	businessmen
Products	general + **cars**. cameras. toys	standard / special screw. paint and processing tool	general	general + 6 classes
Consuming Country(ies)	US	Sweden	Finland	Japan
Source Countries	US. Japan. W/Germany	Sweden. England/ W/Germany. France/Italy (pairwise)	Finland. England, France. Sweden. US W/Germany. Japan. USSR	US. Japan. W/Germany. England. France
Measure of Evaluation	attitude toward foreign product	"**perceived risk**"	attitude toward "made in" label	**stereotyped** "made in" image
Mode of Data Collection	self- administered questionnaire	personal	self- administered questionnaire	self- administered questionnaire
Sampling Method	convenience	probability	convenience	convenience
Product Attributes and /or Country Image Dimensions	12 concepts. fragile-sturdy. inventive-imitative. inferior-superior. tech-advanced -backward. workmanship. styling. value	country. supplier /bid characteristics: location. size. price. quality 3dimensions of uncertainty	4 dimensions: (a) attitudes toward products. (b) attitudes toward marketing practices. (c) desire country name in shopping (d) satisfaction	6 quality dimensions: price/value. service. engineering. advertising. reputation. design/styling
a) T or I, b) E or A, c) S or M	I A S	I E M	I A S	I A S
Sample	293	43	303	100
Analysis Method and/ or Scale used	5 points. 7 item semantic differential scale. **Hotelling's T**	5-point scale	one-way analysis of variance. **F**-ratio. 31 **Likert** type statements. 5-point scale	popularised the use of **Semantic Differential Scales**
Relations with Previous research	"Ernest Dichter"			extension of Nagashima (1970).
Findings	the broad macreomeasures of attitude not only may be misleading. but-unnecessary as well	refining the perceived risk model	significant different images of: (a) product attributes or qualities. (b) non-product aspects of marketing mixes. (c) satisfaction with "made in" labels	the *attitude change* of the Japanese businessmen. Similar results to Dornoff. Tankersley. and White (1974)

(e)

Year	1977	1978	1978	1978
Author(s)	Hampton	Bannister & Saunders	Baumgartner & Jolibert	White & Cundiff
Subjects	adults + students	adults	consumers	industrial buyers
Products	27 products in 3 classes	durable goods in general	16 products in 4 product classes	lift truck. dictation system. machine tool
Consuming Country(ies)	US	UK	France	US
Source Countries	Algeria. Brazil. Canada. Hong Kong. Japan. Pakistan. Turkey Philippines. W/Germany	France. Italy. Japan. US. England. USSR. W/Germany	England. France. US. W/Germany	US W/Germany. Japan. Brazil
Measure of Evaluation	**perceived risk** based on product origin	**stereotypes** in perceptions	**perceived risk** & perceptions of foreign products	**stereotyped** industrial buyers' perceptions
Mode of Data Collection	self- administered questionnaire	self-administered questionnaire and interview	self- administered questionnaire and interview	self- administered questionnaire
Sampling Method	convenience	convenience	probability	probability
Product Attributes and /or Country Image Dimensions	degrees of risk	reliability. value for money. appearance. availability. standard of workmanship	4 types of risk: absence of perceived risk. financial/performance. physical. social/psychological	country. price
a) T or I, b) E or A, c) S or M	I E M	I A S	I A S	I E M
Sample	176	224	108	236
Analysis Method and/ or Scale used	5-point scale. Spence. Engel. and Blackwell perceived risk scale. two way analysis of var.	7- point semantic differential scales	7-point scale. **ANOVA.** Dundan's multiple-range test	7-point semantic deferential scale: **F** ratio. **ANOVA**
Relations with Previous research	basis from Nagashima(1970) . Reierson (1966. 1967). Schooler (1965.1971). Schooler and Sunoo (1969)	Reierson's (1966). and Nagashima's (1970.1977) concepts/ methodology	basis from Nagashima(1970) . Reierson (1966. 1967). Schooler (1965.1971). Schooler and Sunoo (1969)	Monroe's literature review
Findings	country and product groups effected perceived risk independently	existence of **stereotyped images**	the French consumer has a very strong preference for domestic products	Country effect significant for all products. "COO cue is important in the quality evaluation."

(f)

Year	1979	1979	1980	1980
Author(s)	Chasin & Jaffe	White	Halfhill	Niffenegger. White & Marmet
Subjects	industrial buyers	purchasing manager	students	retail manager
Products	10 product categories	industrial products in general	general + cameras. toys. **automobiles**	6 products categories in **automobiles.** foods. etc.
Consuming Country(ies)	US	US	US	UK
Source Countries	Czechoslovakia. Hungary. Poland. Rumania. USSR	US. France. Italy. England. W/Germany	7 countries	UK. France. US
Measure of Evaluation	**stereotyped** perceptions of "made in"	**stereotyped** perceptions	stereotype and attitude	product image
Mode of Data Collection	personal interview	mail questionnaire	self- administered questionnaire	s/a questionnaire personal drop-off and pick-up
Sampling Method	convenience	probability	convenience	quota
Product Attributes and /or Country Image Dimensions	Quality. style. workmanship. dependability. adv. technology: credit/terms. value for money. on time delivery. reputation. maintenance/service	expensive. price. quality. technicality. workmanship. inventiveness. selection. serviceability. advertising. durability. reliability. brand recognition	national image vs product image	price and value. advertising and reputation. service and engineering. design and style. consumer profile
a) T or I, **b) E or A,** **c) S or M**	I A S	I A S	I A M	I A S
Sample	68	213	130	92
Analysis Method and/ or Scale used	9 scale value ranging	12 items. 7-point semantic differential scale	7 items. 5-Point s/d scale. F distribution by MANOVA	18 items. 7-point semantic differential scale
Relations with Previous research			Etzel & Walker's (1974) methodology. Nagashima (1970)	Nagashima (1977)
Findings	the quality of the products manufactured in E. European countries was inferior to "the West". **(Stereotypes)**	existence of **stereotyped country images**	existence of national stereotypes (rather than opinions about specific products).	retail managers' opinions varied according to the country and product

(g)

Year	1981	1982	1983	1984
Author(s)	Narayana	Cattin. Jolibert and Lohnes	Kaynak & Cavusgil	Morello
Subjects	adults	industrial buyers	adults	students
Products	in general	industrial products in general	in general + 4 product classes: electronic. food. fashion. household goods	in general
Consuming Country(ies)	**US, Japan**	US. France	Canada	**Dutch, Italy**
Source Countries	US. Japan	US. France. England. Japan. W/Germany	25 countries	Belgium. France. USSR Holland. Italy. Spain. US. W/Germany
Measure of Evaluation	**stereotyped** "made in" image	**stereotyped** "made-in" concepts	quality perception - country factor	**stereotyped** images
Mode of Data Collection	self- administered questionnaire	self- administered questionnaire	personal interview w/ structured. s/a questionnaire.	self- administered questionnaire
Sampling Method	probability	probability	non-probability	convenience
Product Attributes and /or Country Image Dimensions	quality recognition prestige production-form expensiveness popularity functionality	5 quality dimensions: pricing. reliability. workmanship technicality. performance.	5 dimensions: reliability. pricing. workmanship. technicality. performance	evaluation. potency. activity
a) T or I, b) E or A, c) S or M	I A M	I A S	I A S	I E M
Sample	200	220	197	66
Analysis Method and/ or Scale used	20 items. 7-point semantic differential scale. factor analysis	20 bipolar dimensions. 7-point semantic differential scale. factor analysis	5-point **Likert** scale.	12 seven-point (-3 to +3) bipolar scales. country-basis analysis
Relations with Previous research	Nagashima's (1970) semantic differential format	Nagashima's (1970.1977) questionnaire		
Findings	most of the image factors seem to be related to advertising Findings were supported by Jaffe and Nebenzahl (1984).	cross-cultural response bias: clarification of dimensions. Findings were supported by Jaffe and Nebenzahl (1984).	a product's country of origin has usefulness for distributors wishing to determine and exploit the stereotyped images	a close connection. as **stereotypes**.exists between **attitudes towards countries** and **attitudes towards their products**.

(h)

Year	1984	1985	1985	1985
Author(s)	Erickson. Johansson and Chao	Johansson. Douglas and Nonaka	Lumpkin . Crawford and Kim	Johansson and Thorelli
Subjects	students	students	adults	students
Products	**automobiles**	**automobiles**	apparel	**automobiles**
Consuming Country(ies)	US	US. Japan	US	US. Japan
Source Countries	Germany. Japan	US. Japan. Germany	US, Italy. China. Korea. France. Japan.Hong Kong Mexico.Taiwan. Singapore	US. Japan. W/Germany
Measure of Evaluation	**attitudes. beliefs.** familiarity	**beliefs**	degree of **perceived risk,** willingness to buy	a decision model for product positioning
Mode of Data Collection	self- administered questionnaire	self- administered questionnaire	self- administered questionnaire	self- administered questionnaire
Sampling Method	convenience	convenience	probability	convenience
Product Attributes and /or Country Image Dimensions	10 car models. 5 attributes: price*. mileage. reliability*. durability*. workmanship*. (* 4 quality dimensions)	10 car models. 13 attributes: reliability. price. horsepower. driving comfort. handling. safety. acceleration. gas mileage. styling. durability. workmanship. colour selection. passenger comfort	9 product categories. price/quality perception. money-back guarantee. store reputation. other warranties. country of manufacture. brand-name reputation	10 car models. 12 attributes: reliability. horsepower. driving comfort. handling. safety. acceleration. gas mileage. styling. durability. workmanship. colour selection. passenger comfort
a) T or I, b) E or A, c) S or M	I E M	I E M	I E S	I E M
Sample	96	152	1462	152
Analysis Method and/ or Scale used	5-point s/d scales. sequential **F**-tests. ordinary least squares (OLS). multivariate analysis	principal-components factor analysis. multivariate analysis	5-point scale. **T**-test	"true" attribute value. perceptual maps. int'l positioning framework
Relations with Previous research		basis from Erickson. Johansson. and Chao (1984)		Johansson. Douglas and Nonaka (1985)
Findings	**belief-attitude model** (multi-attribute framework) Image variables influence belief formation rather than attitude	**conceptual model** (multi-attribute framework) Country of origin to be less significant than generally believed	The risk attributable to a specific country tends to differ among the product categories	Country stereotypes can change considerably over time

(i)

Year	1986	1987	1987	1988
Author(s)	Johansson & Nebenzahl	Darling	Parameswaran & Yaprak	Han & Terpstra
Subjects	adult customers	students and businessmen	businessmen	adults consumers
Products	**automobiles**	in general	**car**. camera. calculator	TV sets. **automobiles**
Consuming Country(ies)	US. Japan	Finland	US. Turkey	US
Source Countries	US. Japan. Korea. Mexico. W/Germany. Philippines	England. France. Japan. US W/Germany	W/Germany. Japan. Italy	Germany. US. Korea. Japan
Measure of Evaluation	**beliefs** on brand / country images	**stereotypes** on "made-in" label	attitudes	**beliefs**
Mode of Data Collection	personal interview	self- administered questionnaire	self- administered questionnaire	personal interview
Sampling Method	convenience	convenience and probability	convenience. random	quota
Product Attributes and /or Country Image Dimensions	economy-status. reliable. durable. reasonably priced exclusive. stylish innovative pride of ownership. low service costs. high quality. high performance good workman-ship. economical to run. for young people	13 product dimensions. 13 marketing practices. 5 general	general country attitudes (GCA). general product attitudes (GPA). specific product attributes (SPA): cars. cameras. calculators	technical advancement. prestige. serviceability. workmanship. economy
a) T or I, b) E or A, c) S or M	I E M	I A S	I A S	I E M
Sample	320	1.113	360	150
Analysis Method and/ or Scale used	7-point bipolar scales. factor analysis. joint space mapping	5-point scale. 31 "Likert-type" statements. **F-ratio. longitudinal analysis**	5-point "Likert" scales. ANOVA	7-point Likert scale. F-test. Hotelling's T
Relations with Previous research		Darling (1975. 1980. 1985)	Davis. Douglas and Silk (1981)	Nagashima's (1970.1977) scale
Findings	Focused on hybrid products. Significant effects of country of manufacture on **brand** ratings. **Country-brand interactions.**	significant different images on product attributes and qualities.	the same scales may have different reliabilities in different cultures	sourcing country stimuli have more powerful effects than brand name on consumer evaluations of bi-national products

(j)

Year	1989	1989	1989	1990
Author(s)	Han	Chao	Hong & Wyer	Papadopoulos. Heslop & Bamossy
Subjects	adults consumers	adults consumers	students	adults
Products	colour TV sets. **automobiles**	TVs. VCRs. stereo system	PC. VCR	general
Consuming Country(ies)	US	Korea. US	US	8 countries
Source Countries	US Japan. Korea	Brazil. US. Germany. Korea. Japan	W/Germany. Mexico. Japan. Korea	5 countries: home. US. Japan. Sweden. Germany
Measure of Evaluation	attitude	quality	**beliefs**. effect of information	perceptions
Mode of Data Collection	telephone	personal interview	self- administered questionnaire	questionnaire
Sampling Method	probability	convenience	convenience	systematic cluster. quota
Product Attributes and /or Country Image Dimensions	technical advancement. prestige. workmanship. price. serviceability	good sound. reliability. crisp-clear picture. stylish design. sturdy construction	country and 21attributes: 5 desirable. 5 undesirable. 5 ambiguous. and 6 unimportant attributes	product integrity. price-value. market presence. response.
a) T or I, b) E or A, c) S or M	I A M	I A M	I E M	I A S
Sample	116	240	128	*2.220*
Analysis method and/ or Scale used	seven point semantic differential scale. LISREL	6-point scale. MANOVA	-5/+5 ranging scales	21 seven point semantic differential scale
Relations with Previous research	Nagashima's (1970.1977) scale Han & Terpstra (1988). Warwick & Lininger's (1975) procedure	Reierson (1967)		
Findings	**conceptual models**. role of country image	existence of stereotyped product evaluation	country of origin itself influenced product evalua-tions regardless of the additional product attribute information	longitudinal stability of country images

(k)

Year	1990	1992	1992	1993
Author(s)	Darling and Wood	Cordell	Roth and Romeo	Chao
Subjects	business managers and university administrators	adults. consumers	students	residents
Products	consumer product in general	8 products incl: wristwatch. camera. elec. typewriter. VCR.	beer. crystal. **automobiles.** leather shoes. bicycles. watches	TV set
Consuming Country(ies)	Finland	US	Ireland. Mexico. US	US
Source Countries	US. Japan	7 developed countries. 7 less developed countries (LDC)	England. Spain Germany. US Hungary. Ireland. Japan. Korea. Mexico. France	Taiwan. Thailand. Mexico US Japan
Measure of Evaluation	perceptions comparing the images	**perceived risk.** preferences	willing to purchase	perceptions of product quality
Mode of Data Collection	self-administered questionnaire	telephone	Self-administered questionnaire	telephone
Sampling Method	convenience	probability	convenience	probability
Product Attributes and /or Country Image Dimensions	13 consumer product attributes 13 marketing practices 5 consumer preferences	country of origin effect. country class. country by brand interaction. country by performance risk interaction	innovativeness. design. prestige. workmanship	innovativeness. exclusiveness. stylishness for Design.Workman-ship. reliability. durability. quality for Product.
a) T or I, b) E or A, c) S or M	I E S	I E S	I A S	I E M
Sample	1.113	199	316	120
Analysis Method and/ or Scale used	5-point scale. 31 "Likert-type" statements. **ANOVA**	MANOVA. 3 point scale	LISREL: factor analysis 7-point scale	ANOVA: Hotelling's T2 5-point scale
Relations with Previous research	Darling (1975. 1980. 1985. 1987)	Bilkey & Nes (1982). basis from Nagashima(1970) . Reierson (1966. 1967). Schooler (1965.1971).		
Findings	empirical evidence of changes in Finnish perceptions toward foreign products. *"Longitudinal Perspective"*	preference biases against products from less developed countries persist.	Product-Country Matches and Mismatches Frame. country-product image dimension.	consumer evaluation of design and product qualities are influenced by price. CoD. and CoA.

(I)

Year	1993	1993	1994	1995
Author(s)	Martin and Eroglu	Kamins and Nagashima	Du Preez. Diamantopoulos and Schlegelmilch	Lee and Sirgy
Subject(s)	students & adults	businessmen	adults	students
Product(s)	in general	in general	**automobiles**	**automobiles.** watches (bi-national brands)
Consuming Country(ies)	US	US	Korea. Spain. France	US
Source Countries	Nigeria. France, Korea. Yugoslavia	US Japan	Korea. Spain. France	Switzerland vs China. Germany vs China
Measure of Evaluation	attitude	"made-in" perceptions	preferences. purchase intention	brand prestige. purchase intention
Mode of Data Collection	self-administered questionnaire	mailing questionnaire	computer aided questionnaire[12]	self- administered questionnaire
Sampling Method	convenience	probability	probability	convenience
Product Attributes and /or Country Image Dimensions	3 country image factors: political. economic. technological. 5 social desirabilities	8 attributes of Nagashima's 20 product image attributes	Country-of-origin and 17 attributes on car product	COM favourable-ness vs brand prestige on brand evaluation and purchase intention.
a) T or I, b) E or A, c) S or M	I E M	I A S	I E M	I E M
Sample	200	100	276	192
Analysis Method and/ or Scale used	14-item semantic differential scale	7-point pseudo semantic differential scale. one-way **ANOVA**	Chi-square. Spearman-Rank Correlations	**MANOVA** 7-point Likert scales
Relations with Previous research	Churchill's paradigm	Nagashima (1970. 1977)		
Findings	the ability to use measures of country image to predict the probability of purchase behaviour	a longitudinal approach. The image of a country's products is changeable	a dollar metric scale; a conjoint - analytic approach . cross-country analysis	cross- cultural studies on COM and brand prestige effects

[12] The computer-aided questionnaire is based on a proprietary IDAS (Interactive Decision Analysis System) programme which has been developed by the Department of Marketing of the University of Regensberg in Germany.

(m)

Year	1995	1995
Author(s)	Ahmed. d'Astous, & d'Almeida	Li. Dant. Wortzel
Subject(s)	female adult consumers	
Product(s)	garment "pagne"	men's white office dress shirt
Consuming Country(ies)	Ivory Coast	
Source Countries	Holland. Canada. Ivory Coast	
Measure of Evaluation	perceived quality and purchase value	consumers' quality perceptions
Mode of Data Collection	self-administered questionnaire	
Sampling Method	convenience	
Product Attributes and /or Country Image Dimensions	design(COD). assembly(COA). brand. price. satisfaction assurance	Gavin's eight product quality dimensions
a) T or I, **b) E or A,** **c) S or M**	I A M	T E S
Sample	110	776
Analysis Method and/ or Scale used	ANOVA. 9-point bipolar scales	LISREL
Relations with Previous research	Ouarrara (1991)	*Gavin's* taxonomy[13]
Findings	preference existence on products manufactured in developed countries	Made-in label did not directly affect product quality. Causal path of **Made-in Label > Country Image > Product Quality**

for specific brands (Chao, 1989; Gaedeke, 1973; Han and Terpstra, 1988).

Country bias has been demonstrated in broadly-based consumer and purchasing manager samples (Cattin, Jolibert, and Lohnes, 1982; Greer, 1971; Haakansson and Wootz, 1975;

[13] It has composed of eight dimensions: performance. features. reliability. durability. conformance. serviceability. aesthetics. and image. See Kotler (1994) and Zeithaml (1988) for a review

Lillis and Narayana, 1974; Nagashima, 1970,1977; Schooler, 1965, 1971; Schooler and Sunoo, 1969; Schooler and Wildt, 1968; White, 1979; White and Cundiff, 1978).

Other product-country images research indicates that product evaluations vary differentially within developed countries (Bannister and Saunders, 1978; Darling and Wood, 1990; Dornoff, Tankersley, and White, 1974; Hampton, 1977; Han and Terpstra, 1988; Kamins and Nagashima, 1993; Lillis and Narayana, 1974; Nagashima, 1970, 1977; Papadopoulos, Heslop, and Bamossy, 1990; Parameswaran and Yaprak, 1987; Reierson, 1966; Schooler, 1971; Schooler and Wildt, 1968; Wang, 1978; White, 1979; White and Cundiff, 1978); and between developed and developing countries (Chao, 1989; Cordell, 1992; Gaedeke, 1973; Johansson and Nebenzahl, 1986; Schooler, 1971).

Previous research has found differences in country stereotypes among different nationalities, which may reflect a country's level of economic development, and also prejudices in favour of "home" versus "foreign" country products (Bilkey and Nes, 1982; Baumgartner and Jolibert, 1977; Darling and Kraft, 1977). Country of origin stereotypes and perceptions toward foreign products are also shown to change over time for product quality image (Damanpour, 1993; Darling and Wood, 1990; Dornoff, Tankersley, and White, 1974; Nagashima, 1977). Advertising and promotion *have been show to affect* country image (Jaffe and Nebenzahl, 1993; Nebenzahl and Jaffe, 1991; Reierson, 1967). For example, Nebenzahl and Jaffe (1991) found that sponsorship of the 1988 Olympic games held in Seoul, Korea led to more positive attitudes towards electronic consumer goods made in South Korea.

Nes and Bilkey (1993) relate the country of origin cue to perceived risk (e.g., Baumgartner and Jolibert, 1978; Cordell, 1992; Haakanson and Wootz, 1975; Lumpkin, Crawford, and Kim, 1985; Hampton, 1977). Findings of their study lead to two main conclusions. First, country of origin is salient for evaluating perceived product quality and risk. Second, there is a positive relationship between product evaluations and degree of economic development of the source country.

Halfhill's (1980) study of American consumers' attitudes toward products made in several countries from the basis of previous research of Etzel and Walker (1974). Bannister and Saunders' (1978) study of consumer attitudes toward the products made in seven countries based on work of Reierson's (1966) and Nagashima's (1970, 1977) concepts. Gaedeke's (1973) research on similar topics was based on Reierson's (1966) methodology.

Erickson, Johansson, and Chao's (1984) purpose was to determine whether or not the country of origin of an automobile had any effect on subjects' beliefs or attitudes regarding the automobiles (i.e., Elliott and Cameron, 1994). Erickson, Johansson, and Chao (1984) presented their subjects with a list of ten automobiles and five attributes of these automobiles (i.e., price, mileage, reliability, durability, and workmanship). Johansson, Douglas, and Nonaka (1985) used the study by Erickson, Johansson, and Chao (1984) as a basis for their research. Johansson, Douglas, and Nonaka's (1985) manipulation added more attributes for 10 automobiles (the same 10 automobiles as in Erickson, Johansson, and Chao's (1984) study).

Numerous articles continue to explore several aspects of product-country image effects. The effects of product-country images on the evaluation of "hybrid" and bi-national versus uni-national products have been addressed by Han and Terpstra (1988) and Johansson and Nebenzahl (1986). Johansson and Nebenzahl (1986) measured in absolute terms how much above or below a base price consumers would be willing to pay for an identical model car manufactured in several countries.

Chao and Rajendran (1993) found that personality variables have a moderating effect of country of origin Wang and Lamb (1983) studied the influence of environmental conditions that exist in the product's country of origin on consumers' readiness to accept foreign products. Other recent product-country images research has looked at the effects of image variables on beliefs and attitudes in the multi-attribute model framework (Erickson, Johansson and Chao, 1984; Hong, 1990; Johansson, Douglas and Nonaka, 1985).

In summary, researchers have begun to address the questions of how and why country image affects consumers' beliefs and attitudes toward products. This theoretical work is encouraging in that most early product-country images research were primarily descriptive in nature. While numerous studies found the salience of country image effects on the product evaluations, most of those studies failed to compare the differences of consumer groups, as different consumer markets. It is still unclear exactly how country image is utilised in product evaluations, and what the relationships between country image and consumers' product evaluations are.

With analytic review of prior studies on product-country images, the findings could be summarised as *three main streams*:

- **Theories;** although a number of researchers have begun the process of developing theoretical frameworks and theories of process for the role of product-country images in consumers' product evaluations (i.e , historical overview by Papadopoulos, 1993; literature review by Baughn and Yaprak, 1993; Bilkey and Nes, 1982), they are **lacking on the theory building** and focus only on operational level of country of origin (COO), not by country of target (COT),

- **Methodologies**; Peterson and Jolibert (1995) assessed the country of origin effect, quantitatively, by means of a type of meta-analysis. Liefeld (1993) also applied the meta-analysis method using 6-pairs of independent variables. Specifically, Han et al. (1994) empirically examined the choice of a survey mode in country image studies. But, there is still **no validated scale** for measuring country image per se (i.e., Martin and Eroglu's argument, 1993), and **meta-analysis** approaches are needed (i.e., Liefeld, 1993; Peterson and Jolibert, 1995)

- **Model conceptualisations**, Obermiller and Spangenberg (1989), Johansson (1989), and Han (1989) present models describing the process of country image and country of origin effects. However, the study on product-country images needs further

development of **conceptual models** (i.e., Han, 1989; Johansson, Douglas and Nonaka, 1985; Erickson, Johansson and Chao, 1984).

2.8 Summary

This chapter focused reviews of the nature of country image, "made-in" issues, and country of origin effects for the conceptual foundations of country of origin and country of target in this study. Previous studies on these issues are summarised by those major factors which have been reported to affect the country of origin effects in product evaluation: country characteristics; product attributes, and consuming countries, and subjects.

This chapter included a brief overview of theoretical models (i.e., Han's, 1989; Johansson's, 1989) and methodologies employed in the various studies. It also evaluated the findings of the previous studies and the models on the product-country image issues and summarised the theoretical background concerning country of origin effects as the Table 2.3.

Finally, an in-depth review of previous literature provided research hypotheses and a causal model of interpretations which is to assess the role of country image in product evaluations in the following Chapter. Chapter Three also explains the constructs of the model.

Chapter 3
The Hypotheses and
Model Conceptualisation

3.1 Introduction

Although previous researchers have explored country of origin effects, there is little insight into what the role of country image is in product evaluations. This study attempts to identify the role of country image through the measurement of consumers' beliefs about countries and their attitudes towards products from those countries. Key questions are. what underlies consumers' attitudes toward products from a particular country, and, what is the role of country image - is it a halo or summary construct? Are these issues particular to where the research is conducted (country of target), and are they influenced by the product used as a cue?

Thus, the first part of this chapter provides the hypotheses, based on the literature review in the previous chapter, which are developed to test the effects of country image and product image on consumers' attitudes toward specific products (in the form of propensity to purchase). In the second part, a causal model is proposed to assess the role of country image, through three sub-constructs of country of origin, (COO), country of target (COT) and consumers' attitudes as purchase willingness.

3.2 The Hypotheses

What is the relationship between the image of a country and the image of products made in that country? Are there strong relationships between product-country images and consumers' purchase intentions? Eventually, what is the difference between consumers' beliefs and attitudes toward products when these consumers come from different groups?

In general, consumers form country images based on their prior experience and knowledge with products from a given country. Product-country image studies are frequently concerned with country of origin effects on consumers' perceptions of product quality.

While many previous studies have examined the country of origin effects on consumers' overall quality perceptions of products in specific market areas, little has been done to investigate the relationships between the image of a country and the image of products made in that country in terms of globalised concepts and areas. The review of the literature on the relationship between product and country images, models of belief-attitude, and the relationship between images and attitudes, permitted the development of five hypotheses as will be described.

Papadopoulos et al. (1990) found that country image perceptions may vary depending on the level of economic development of the country. The major research findings are related to the country image and prior familiarity or knowledge about the country of origin of the product, as well as the impact of nationality, on overall evaluations of products and evaluations on specific attributes. Johansson and Nebenzahl (1986) report that consumer perceptions for the same product *may vary depending upon where the* product is made. Whatever the underlying psychological mechanisms, whether halo (Johansson, Douglas, and Nonaka, 1985), summary construct (Han, 1989) and/or other psychological mechanisms (Hong and Wyer, 1990), the consensus is that an unfavourable country image will negatively distort a consumer's product evaluation across product type (Han and Terpstra, 1988) and cultures (Cattin, Jolibert, and Lohnes, 1982). Most developed countries tend to have fairly clear images since substantial information about them is available through education, the media, and other sources. Ahmed et al. (1995) found that in general the developed countries obtain better evaluations than the developing countries. Therefore, the following hypothesis is proposed.

> H1a: There are significant differences between consumer groups as country of target market (COT) with regard to the beliefs about the country of origin of the product.

There appears to be a positive relationship between level of economic development and a favourable degree of country image; products from developing countries are evaluated as inferior to those from more industrialised countries (i.e., Ahmed et al. 1994; Cordell, 1992). Johansson et al. (1994) noted that products from more developed countries generally receive more positive evaluations than products from less developed ones. Most studies have also found significant country of origin effects and have assumed that a negative country image is synonymous with low perceived product quality,[1] while the opposite is true of a positive country image. Based on this reasoning, the following hypothesis is offered.

> H1b: Consumer groups will have significantly favourable images, as beliefs on the country, toward the more developed countries rather than on less developed countries as country of origin (COO).

Papadopoulos et al. (1990) found that consumers' perceptions of products may vary depending on the level of economic development of the country of origin. Product familiarity and country familiarity are also defined as the individual's prior knowledge level with respect to the country and the brands in a product class (i.e., Park and Lessig, 1981). Consumers are more likely to use the *country of origin* cue for product evaluations when they have high familiarity with a country's products and where there is little variation in quality between products. According to Li and Monroe (1992), differences in perceived product quality between developed countries and developing countries are due to consumer beliefs that developed countries' workers are more technologically sophisticated than developing countries' workers, and consequently more able to make quality products. Hence, the following prediction is offered as an hypothesis.

> H2a: There are significant differences between consumer groups as country of target market (COT) as regards their beliefs about car products from different countries of origin

[1] Zeithaml (1988) defined perceived quality as the consumer's *judgement* about the superiority or excellence of a product.

Product familiarity has been defined as product related information stored in memory, such as information about brands, products, attributes, evaluations, decision heuristics and usage situations. Products may be conceived of as an array of information cues, both intrinsic (i.e., physical product characteristics) and extrinsic (i.e., non-physical product characteristics) (Olson and Jacoby, 1972; Szybillo and Jacoby, 1974). Consumers may consider not buying an unfamiliar foreign brand simply because they may make unfavourable inferences about the quality of the product from their lack of familiarity with products from the country. Schooler et al. (1987) note that consumers' negative product evaluations based on country images constitute significant market barriers for companies from less developed countries. Thus, the country of origin effect is negative for developing countries (Bannister and Saunders, 1978; Bilkey and Nes, 1982; Gaedeke, 1973; Lillis and Narayana, 1974; Reierson, 1966). Most studies suggest a hierarchy of effects among countries (Schooler, 1971; Wang and Lamb, 1983). Hence, the following prediction is offered as an hypothesis.

> H2b: Consumer groups will have significantly favourable images, as beliefs on the car products, toward the car products from more developed countries than those from less developed countries as country of origin (COO).

Most previous studies have exclusively relied on a single cue, the source country, in analysing country of origin effects. Thus, marketers have been unable to evaluate the relative importance of source country vs. other relevant cues such as brand names in affecting consumer evaluations of products (Han and Terpstra, 1988). Country familiarity can be defined as country related information stored in memory, such as information about geography, location, culture, manufacturing capability, political structure, and so forth. Erickson et al. (1984) found that the country of origin does have a direct effect on beliefs, but not on attitudes (indirectly through beliefs). Country image becomes a surrogate for quality when product information is lacking (Jacoby, Olson, and Haddock,1971), and when there is a lack of familiarity with the product (Monroe, 1976). Cordell (1992) investigated the economic level of the producer country as a determinant of country of origin differences in the belief that consumers esteem products from prosperous countries and derogate those from poor countries. So, country image effects

are strong for consumers with little or no product familiarity (Johansson, 1989). The following hypothesis is therefore postulated:

> H3a: Consumers' purchase willingness will be significantly different between consumer groups as country of target market (COT) for car products.

Consumers in more developed countries tend to regard most products made in less developed ones as being of lower quality than most products made in more developed countries, because products emanating from less developed countries carry a less positive image than products from more developed countries (Gaedeke, 1973; Schooler, 1965). Cordell (1992) investigates the hypothesis that product-specific preferences are more significant when products are from industrialised countries than from less developed countries. A similar hypothesis is suggested, as follows:.

> H3b: Consumers' overall attitudes toward the product positively correlates with the level of economic development of the country of origin. Thus, consumers' purchase willingness will be significantly higher for car products from more developed countries than for those from less developed countries.

In general, it is believed that consumers consider extrinsic cues such as country of origin, brand name, and country of manufacture as product quality indicators, and use them more often when intrinsic attributes are not available (Huber and McCann, 1982; Olson, 1977; Olson and Jacoby, 1972). Because of consumers' inability to detect true quality, they may turn to country image to infer the quality of unknown products (Huber and McCann, 1982) But, if consumers have a high level of product familiarity, country image will have no significant effect on product evaluation as an halo function. This permits the formulation of the following hypothesis:

> H4· A strong relationship, as a halo or as a summary construct, exists between product image and country image in consumers' product evaluations in the case of both more developed countries and less developed countries.

Since the mid-1960's research in this area has focused on the country of origin effects in product evaluations without attention to the development of a construct of consumers' group as "country of target" market (COT). Thus, in this study, another hypothesis is

proposed, in order to examine the differences between consumer groups, in terms of their beliefs and attitudes toward a country and its products.

H5: There are significantly different beliefs regarding a country and its products between consumer groups as country of target market (COT).

3.3 Constructs and the Construction of Models

The focus of this study is to define the role of country image in the product evaluation process using, as constructs, country of origin (COO) and country of target (COT). A number of theoretical models have been proposed for product-country image research. Frankfort-Nachmias et at. (1994) note that a concept is an abstraction - a symbol of a phenomenon - a representation of an object or one of its properties, or of a behavioural phenomenon.[2] Thus, in order to assess the validity of the hypotheses proposed previously, it is necessary to develop measures of the constituent concepts. Thus, this study adopts the two constructs of country of origin (COO) and country of target (COT) for the specific products of prototype automobiles.

In terms of the construct of country image this research uses four dimensions of country image - political, economic, technological advancement, and socio-culture. These items were used in a previous study by Martin and Eroglu (1993). In terms of the construct of product image, this study uses five product attributes: quality, prestige, technology, design, and price. These have been used in prior research (cf. Han and Terpstra, 1988 who factor-analysed 14 items used in the previous studies of Jaffe and Nebenzahl, (1984) and Nagashima, (1970, 1977).

A single measure of overall quality has typically been used to understand the impact of "made-in" stereotypes (e.g., Hong and Wyer, 1989; 1990). Others have used

[2] Frankfort-Nachmias et al. (1994. p.26). They also noted four functions of concepts: (a) Concepts provide a common language. which enable scientists to communicate with one other. (b) Concepts give scientists a perspective - a way of looking at phenomenon. (c) Concepts allow scientists to classify their experiences and to generalise from them. (d) Concepts are components of theories - they define a theory's content and attributes.

multidimensional operationalisations of country image (e.g., Cattin, Jolibert and Lohnes, 1982; Nagashima, 1970). Some of the dimensions identified include technical advancedness, prestige, workmanship, product integrity, price-value, and market presence (Han and Terpstra, 1988; Papadopoulos, Heslop and Bamossy, 1990). Hence, country of origin studies have generally operationalised image as perceptions of products from a country: with regard to overall quality, and/or attributes, and/or of marketing and production properties of the country (Roth and Romeo, 1990). Thus, a valid operational measure may help resolve some of the methodological and conceptual issues raised in the area of country image research.

3.3.1. Country Image as Beliefs

Country image plays a significant role in consumer' perceptions of products. Thus, defining and operationalising the dimensions of country image are necessary in order to conduct research in this area.

Nagashima (1970) describes *image* as ideas, emotional background and connotation associated with a concept. He suggests that country image expresses personalised feelings of what people know and think about a country, and it is developed by representative products, national characteristics, economic and political background, history, tradition, and so forth.

Martin and Eroglu (1993) argued that as yet, there is no validated instrument available to assess country image without tapping into the image of products from the respective country. However, such an approach seems to restrict the concept of 'country image'. Perceptions of countries' products, as well as feelings towards their people, and the desired level of interaction were found to be aspects of country stereotyping (e.g., Parameswaran and Yaprak, 1987).

A product's country of manufacture has been found to serve as a surrogate indicator of quality and hence is a salient dimension of overall evaluation in the event that little else is known about the product (Cattin, Jolibert and Lohnes, 1982; Kamins and Nagashima, 1993; Schooler, 1965). Roth and Romeo (1992) noted that past country of origin research has often treated country quality as a summary construct, rather than as a defined set of dimensions from which quality is inferred (e.g., Crawford and Garland, 1988). However, country image involves symbolic meaning, and is more than the overall quality evaluation or attributes such as technical advancedness, price-value, and so forth.

Although Roth and Romeo (1992) argued that the little research conducted to date indicates country image is really a multidimensional construct, country image has been consistently identified as a multi-dimensional concept (e.g., Cattin, Jolibert and Lohnes, 1982; Jaffe and Nebenzahl, 1984; Han and Terpstra, 1988; Johansson and Nebenzahl, 1986; White, 1979). Several analytic and multi-dimensional scaling studies have indirectly implied some dimensions of country image across various countries (Johansson and Moinpour, 1977; Johansson et al., 1985). Roth and Romeo (1992) used four items to capture country image, while past research used twenty (Narayana, 1981), fourteen (Han and Terpstra, 1988), and thirteen (Jaffe and Nebenzahl, 1984; Johansson and Nebenzahl, 1986) items Not surprisingly, the more items used, the more factors were found (Roth and Romeo, 1992, p.487). Along with the literature review, these four dimensions with 14 items are used to define the construct's domain (1) political, (2) economic, (3) technological advancement, and (4) socio-cultural desirability (e.g., Martin and Eroglu, 1993; Nagashima, 1970, 1977). Table 3.1 shows the four country image dimensions for the study.

Table 3.1

Dimensions of Country Image

Construct	Dimensions	Measured by
Country Image	Political Economic Technological Advancement Socio-Cultural Desirability	Nagashima (1970) Halfhill (1980) Martin & Eroglu (1993)

Martin and Eroglu (1993), following Churchill's (1979) procedures to capture the concept of country image, concluded from the results of a factor analysis and further tests that country image has three, not four, underlying dimensions, because social desirability is captured by the three factors of economic, political, and technological aspects. However, in this study country image is theoretically hypothesised to have four dimensions which includes a socio-culture construct.

3.3.2 Product Image as Beliefs

As Johansson (1989) noted, one of the intuitive notions still enjoying some popularity among international marketers is that country of origin effects are strongest for buyers with little or no product familiarity. The reasoning is that where little information on product attributes is stored in internal memory, more or less relevant indirect evidence (like country of origin) is employed to evaluate products and brands.

Recently, some research in the country of origin topic area has tested for the role of country image and subjects' beliefs with regard to specific automobiles and their attributes (i.e., Anderson and Cunningham, 1972; Du Preez, Diamantopoulos, and Schlegelmilch, 1994, Erickson, Johansson, and Chao, 1984; Johansson, Douglas, and Nonaka, 1985; Johansson and Nebenzahl, 1986; Johansson and Thorelli, 1985), because an advantage of using automobiles is that the country of origin has become an important factor in this market. Furthermore, country of origin is relatively easy to identify for this product class.

Using a system of simultaneous equations with automobiles as the target product, Johansson, Douglas, and Nonaka (1985) noted the presence of a halo effect, in that the overall evaluation of the car appeared to influence ratings on specific attributes. Erickson, Johansson and Chao (1984) examined only a single product, automobiles, for which considerable information is readily available and for which evaluations are likely to be based on some objective characteristics.

Han and Terpstra's (1988) finding suggests that though individual country images differ between product categories, country images on specific product attributes can be generalised across product categories. Thus, in this study, automobiles are selected for the illustration because consumers are considered likely to be aware of the country of origin of selected products.[3]

In order to measure product image in relation to consumer evaluations, attributes of product image can be constructed through the close examination of previous product-country image studies. Table 3.2 shows the five attributes which were identified from the previous research.

Table 3.2
Selected Attributes of Product Image

Construct	Attributes	Measured by
Product Image	Quality Prestige Technical Adv. Design Price	Li et al. (1995) Han (1989) McGee and Spiro (1991) Nagashima (1970, 1977) Niffenegger et al. (1980)

Quality

Country of origin researchers have investigated country of origin effects on quality dimensions (e.g., reliability, durability, workmanship) that are applicable to various product categories, even though the preferred quality dimensions tend to be different across studies. Overall quality measures were examined by Ahmed and d'Astous (1993), Gaedeke (1973), Erickson et al. (1984), Hong and Wyer (1989, 1990), Johansson et al. (1985), Kaynak and Cavusgil (1983), Li et al., (1995), Liefeld and Wall, (1993), Reierson (1966), Thorelli, Lim and Ye (1989), and Wall, Liefeld and Heslop (1991).

Prestige

Lee and Sirgy (1995) examined prestige at the brand level of product. They found that high prestige brands are more likely to have a higher level of perceived workmanship

[3] In this study, the use of car products as a means of studying country image ignores the fact that some automobiles have parts produced in one country and assembled in others.

than low prestige brands. Roth and Romeo (1992) defined prestige as a country image dimension along with innovativeness, design and workmanship. In their study, prestige includes exclusivity, status, brand name reputation. But, primarily, prestige was investigated as a measure for product evaluations by Han (1989), Han and Terpstra (1988), Jaffe and Nebenzahl (1984), Johansson and Nebenzahl (1986), Narayana (1981), and White (1979).

Technical Advancedness

Technical advancedness is one of the product-specific attributes which is likely to be easily transferable to product-country images. Han and Terpstra (1988) measured country images at the level of specific product dimensions, namely, technical advancedness, prestige, service and workmanship. Martin and Eroglu (1992) argue that technology may also capture country image. In this study, this attribute relates specifically to subjects' perception of car products made in a given country different to the dimension of technological advancement for country image. Cattin et al. (1982), Darling (1987), Han (1989), Han and Terpstra (1988), and McGee and Spiro (1991) used technical advancedness as a product quality attribute.

Design

Nagashima (1970, 1977) used design character as one of the product and one of the country image dimensions. Niffenegger, White and Marmet (1980) measured design/style character as one of the important aspects of product image. Otherwise, Roth and Romeo (1992, p.480) defined design as one of the country image dimensions along with innovativeness, prestige and workmanship. In their study, design includes appearance, style, colours and variety. In product-country images studies, primarily, design or styling was investigated as a product attribute (i.e., Ahmed, d'Astous, and d'Alméida (1995); Chao, 1989, 1993; Darling, 1987; Darling and Wood, 1990; Johansson, Douglas and Nonaka, 1985; Johansson and Thorelli, 1986; Parameswaran and Yaprak, 1987).

Price

The impact of price information on consumer perceptions of product, specifically for price-quality relationships, has been studied rather extensively (i.e., Monroe, 1973;

Monroe and Dodds, 1988). Price, as one of the dimensions, was found from the early studies concerning the effects of country of origin (i.e., Cattin et al., 1982; Niffenegger, White and Marmet, 1980; Peterson, 1970; Reierson, 1966; Schooler, 1965; Shapiro, 1973; White, 1979). If consumer confidence in product quality from a country is low, one would expect a stronger price-quality association. That is, consumers are more likely to use price in product evaluations when they are not familiar with the product (Han, 1989). Johansson and Thorelli (1985) and Johansson and Nebenzahl (1986) have attempted to determine pricing strategy based on country image affect. Eventually, price acts as one of the key variables in consumer product evaluations.

3.3.3 Attitude Towards Product

Attitude represents a predisposition to respond to an object, not actual behaviour toward the object. It is used to refer to an individual's preference, inclination or feelings toward some phenomenon. Attitude plays a pivotal role in the major models describing consumer behaviour. Churchill, Jr. (1995) notes that attitude is one of the more important notions in the marketing literature, because it is generally thought that attitudes are related to behaviour.

> *Obviously, when an individual likes a product he will be more inclined to buy it that when he does not like it; when he likes one brand more than another, he will tend to buy the preferred brand. Attitudes may be said to be the forerunners of behaviour.*[4]

Etzel and Walker (1974) investigated the degree of congruence between general product stereotypes and attitudes towards specific types of product from the same country. Consumers revealed significant differences between general country attitudes and specific product attributes by source country. Hafhill (1980) replicated Etzel and Walker's study by using the same test products, countries and measuring instruments. He also found significant differences between country image and specific product image.

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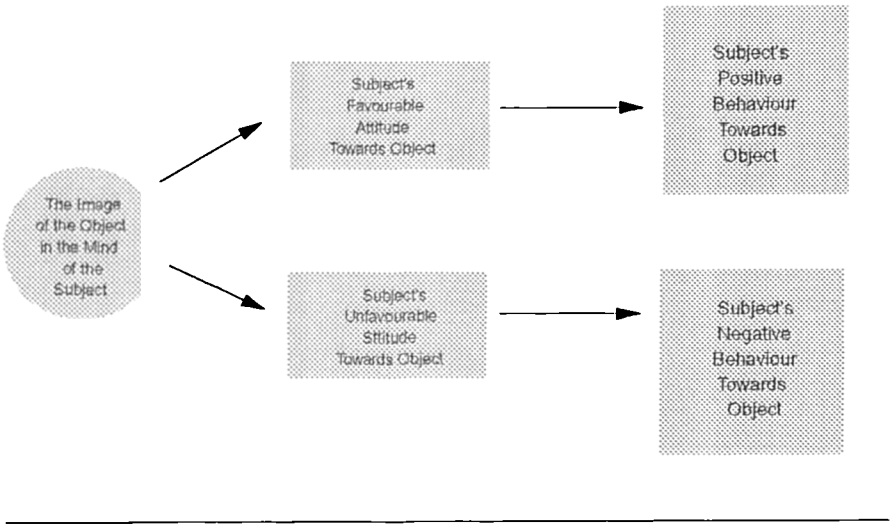
[4] Fred L. Schreier. (1963). Modern Marketing Research: A behavioural Science Approach. Belmont. California. Wadsworth. p.273.

Roth and Romeo (1992) predicted a consumer's purchase willingness through the identification of product-country matches as was discussed in the previous chapter, and Hampton (1977) indicates that perceived risk has an inverse relationship with the willingness to buy products manufactured in developing countries. In this study, attitude is defined as consumers' evaluation of the object, positive/neutral/negative feelings for the product or convictions linked to a specific product. The relationship between image and attitude can be explained by a model which was proposed by Woodruff (1961, p.109) as Figure 3.1. The model implies that mental images lead to favourable or unfavourable attitudes toward the product or concept.

Figure 3.1
The Relationship between Image and Attitude



Adapted fr m Woodruff 1961 p 109

3.4 Two Possible Interpretations as Models

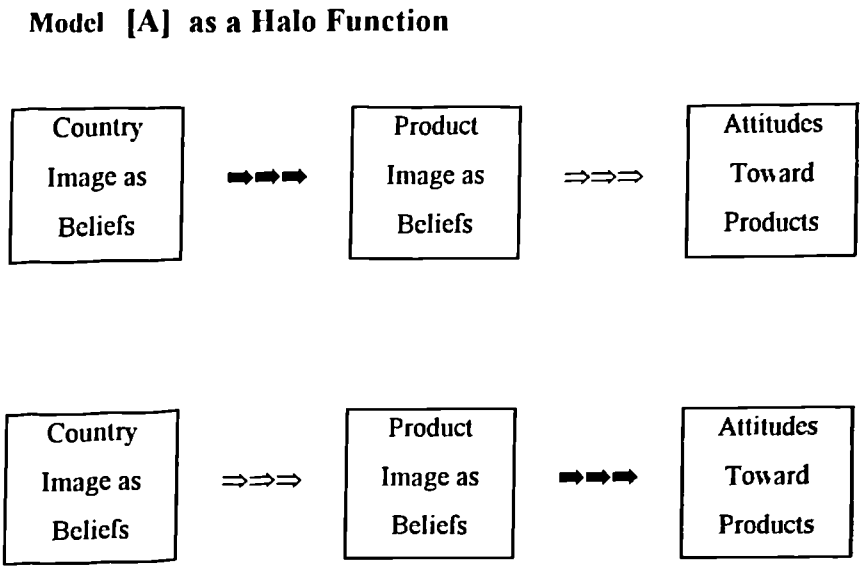
Since the purpose of this study is to identify the role of country image through the test of country image dimensions and product attributes in consumers' product evaluations, the translation of the concepts into variables - attributes/dimensions on which relevant

objects of products and countries can be measured - is needed. Thus, models could be conceptualised as shown in Figure 3.2. Inclusion of familiarity and knowledge variables in these models is necessary, because the variables related to familiarity emerged as distinct through factor and reliability analyses in previous research (Johansson, Douglas, and Nonaka, 1985; Papadopoulos, Heslop, and Bamossy, 1989).

There are two possible ways for interpreting the relationships between product image and country image. One is that consumers use country image in product evaluation when they are unable to detect the product quality or are unfamiliar with a country's products. That is, country image may act as a halo for consumers' product evaluations (Model A in Figure 3.2). For example, Erickson et al (1984) found that the image variable, country of origin, appeared to have direct effects on beliefs and not on attitudes. The other is that product image may help country image, as a summary construct, to summarise consumers' beliefs about product attributes, when consumers are familiar with a country's products. Model B in Figure 3.2 shows the summary construct function of country image in consumers' attitudes toward the products.

Figure 3.2

Causal Relationships Among the Three Constructs



Notes: Arrows show direction of influence:

➡➡➡ shows direct affections. and

⇒⇒⇒ indicates indirect affections.

In the above Figure 3.2, model [A] shows that country image fulfils a halo function, because country image as beliefs affects directly the consumers' perceptions, for product evaluations to occur. Thus, consumers make inferences about product quality, in general, from the country image, and they are willing to behave favourably, or unfavourably toward products from that country.

Otherwise, model [B] shows that country image fulfils a summary construct function. That is, consumers bring their image of product attributes as perceptions into country image, and country image indirectly affects consumers' attitude toward products from the country. In the model, country image as beliefs, is measured by nineteen items from four country image dimensions, covering consumers' general knowledge and specific knowledge about the country (questions: C1 to C19 of country image questionnaire). Product image as beliefs on the car products is measured with 12 items from five product attributes (questions; P1 to P12 of product image questionnaire). Finally, consumers' attitudes toward the car products is measured as their purchase willingness (question: P13 of product image questionnaire).

3.5 Summary

This chapter has provided the hypotheses to be tested in the following two chapters, developed from the literature review in Chapter 2. The hypotheses are based on three basic questions:

- Are there differences between consumer groups' beliefs when the countries of origin have different levels of economic development?
- Are there differences between consumer groups' beliefs regarding products which come from countries of origin which have different levels of economic development?.

- What are the relationships between the three sub-constructs of country image, product image, and purchase willingness, and do they best describe country image as a halo or a summary construct?

In the second part of this chapter, the constructs of the proposed model have been illustrated with the sub-constructs of country image, product image and purchase willingness. Finally the models were developed based on Han's (1989) causal models, in order to test the hypotheses to justify the role of country image, and to interpret the relationships amount of the three sub-constructs. One model tests the halo function, and the other the summary construct function. In the following chapter the limitations of previous studies in terms of methodology will be discussed, and the methodology employed in this study will be explained. Chapter 4 will also provide an initial statistical analysis of instrument reliability and validity.

Chapter 4
Research Methodology

" All good intellects have repeated, since Bacon 's time, that there can be no real knowledge but that which is based on observed facts." - Auguste Comte (1853)

4.1 Introduction

The literature review in Chapter 2 identified the following research methodological limitations which can be summarised as follows. First, most product-country image studies used the single cue, particularly until the mid 1980s. Second, there is a lack of measurement validation. It is difficult to assess the extent and nature of the country image impact on product evaluations without an accurate instrument to measure it. As a result, there are no integrative, conceptual models to provide the causal effects of country of origin (COO) and the country of target (COT). Third, most of the research has been conducted in North America and many of the previous studies have been limited to US respondents.

Thus, this chapter discusses the limitations of methodology used in previous research and the methodology employed in data collection for this study. The first section of this chapter outlines the nature of research and the methodological issues in research design. The second section presents data collection procedures, and discusses the country image dimensions and product attributes as measures of product-country images. This section also explains subjects and questionnaire design for the development of the prototype automobiles experiment. The third section shows the results of a factor analysis of variables for the establishment of instrument reliability and validity. Finally, the procedures for hypothesis tests are presented, with descriptive statistics.

4.2 The Philosophy of Research Design

4.2.1 Nature of Research

Easterby-Smith et al., (1991) categorise management research into three main types: pure, applied and action research. These are distinguished primarily by the outcomes that are assumed to emerge - although the distinctions do not hold clearly in practice. Firstly, the key feature of pure research is that it is intended to lead to theoretical developments with a possibility of practical implication. There are three types of outcomes, Hawthorn Effect as discovery, Taylor's Scientific Management[1] as invention and Herzberg's theory of motivation[2] as research reflection.

Secondly, applied research is intended to lead to the solution of specific problems which could explain the event rather than simply describing things. This research, commonly, is applied for evaluation of the process and results of particular courses of action - such as the reorganisation of business process, or the introduction of new technology. Finally, action research involves participants (the researcher and the researched) who are sharing understandings through the research findings.

A laboratory experiment is the most controlled method of data collection. It is distinguished from the field experiment, primarily in terms of environment. The laboratory experiment is one in which an investigator creates a situation with the desired conditions and then manipulates some while controlling other variables, while a field experiment is a research study in a realistic or natural situation, although it involves the manipulation of one or more independent variables under as carefully controlled conditions as the situation will permit. That is, the analyst creates a setting for a laboratory experiment, whereas a field experiment is conducted in a natural setting (Churchill, Jr., 1995).

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[1] Taylor, F.W., (1947). Scientific Management. London. Harper and Row.

[2] Herzberg. F., Mausner. B. and Snyderman. B.B.. (1959). The Motivation to Work. New York. Wiley.

According to Kerlinger (1986, p.372), "field studies are nonexperimental scientific inquiries aimed at discovering the relations and interactions among sociological, psychological, and educational variables in real social structures." Scientific studies that systematically pursue relations and test hypotheses, that are *ex post facto*, and that are done in real-life-like situations like classrooms are also considered field studies (Kerlinger, 1986).

There are certain advantages and disadvantages which result from the different procedures in the laboratory type and the field type experiments. Whereas the field experiment is typically more externally valid, the laboratory experiment is generally believed to be more internally valid because of the greater control it affords. Internal validity refers to the ability to attribute the effect that was observed to the experimental variable and not to other factors.

External validity focuses on the problems of collecting data demonstrating that the changes in the criterion variable observed in the experiment as a result of changes in the predictor variables can be expected to occur in other situations. Furthermore, in the laboratory experiment,[3] those who agreed to participate may not be representative of the large population of consumers. Because the location of the study is atypical, those who willingly participate in such a study may be systematically different from whose who decline to participate (Churchill, Jr., 1995).

Prior research on product-country images can be described as demonstrational in nature; most research was concerned with demonstrating the existence of the country of origin effect under a variety of circumstances (Peterson and Jolibert, 1995)[4]. Ozsomer and Cavusgil (1991)[5] concluded that "most of the recent country of origin studies provide us with little generalisable knowledge" (p.274). Likewise, despite the extensive amount of

[3] It is questionable whether the results can be generalised to other populations and settings, because laboratory experiments are more artificial than field experiments (Lynch, Jr., 1982).
[4] They also argue that "the construct itself is relatively ambiguous and has been interpreted and operationalised in widely divergent ways in the literature" (p.885).
[5] Which is an updated article of the Bilkey and Nes work.

research that has been conducted on the country of origin effect, a fundamental question remains: *how generalisable is the country of origin effect?*

Consider the findings of single - versus multiple - cue studies. Single-cue studies of the influence of country of origin on product perceptions and purchase intentions have been criticised on the basis that the significant results that have been obtained are likely reflect methodological artifacts rather than substantive differences (e.g., Bilkey and Nes, 1982; Johansson, Douglas and Nonaka, 1985; Ozsomer and Cavusgil, 1991).

The study described here is experimental in nature. The design of this research is an *ex post facto* (it means 'from what is done afterward.') laboratory study which used a questionnaire to collect data from controlled sampling groups (Churchill, Jr., 1995; Katz, 1953; Kerlinger, 1986). That is, this study used controlled experimental group sampling. The sample was both representative of the population of interest and could offer the insight sought (Churchill, Jr., 1995; Kerlinger, 1986). The appropriateness of this sample is discussed later in this chapter.

4.2.2 Methodological Issues in Research Design

Easterby-Smith et al. (1991, p.22) note that there are two appropriate philosophical positions from which method should be driven; one is phenomenology, and the other is positivism. Although it is possible to draw up comprehensive lists of assumptions and methodological implications associated with each position, it is not possible to identify any one philosopher who ascribes to all aspects of one particular view.

The key idea of positivism is that the social world exists externally, and that its properties should be measured through objective methods, rather than being inferred subjectively through sensation, reflection or intuition. Auguste Comte (1853) states two assumptions: firstly, that reality is external and objective; secondly, that knowledge is only of

significance if it is based on observations of this external reality. There are a number of propositions of positivism as below (Easterby-Smith et al., 1991, p.23):

1. *independence*: the observer is independent of what is being observed;
2. *value-freedom*: the choice of what to study, and how to study it, can be determined by objective criteria rather than by human beliefs and interests;
3. *causality*: the aim of social sciences should be to identify causal explanations and fundamental laws that explain regularities in human social behaviour;
4. *hypothetico-deductive*: science proceeds through a process of hypothesising fundamental laws and then deducing what kinds of observations will demonstrate the truth of falsity of these hypotheses;
5. *operationalisation*: concepts need to be operationalised in a way which enables facts to be measured quantitatively;
6. *reductionism*: problems as a whole are better understood if they are reduced into the simplest possible elements;
7. *generalisation*: in order to be able to generalise about regularities in human and social behaviour it is necessary to select samples of sufficient size;
8. *cross-sectional analysis*: such regularities can most easily be identified by making comparisons of variations across samples.

The view that positivism provides the best way of investigating human and social behaviour originated as a reaction to metaphysical speculation (Aiken, 1956). Kuhn (1962) used the term of 'paradigm' to describe the progress of scientific discoveries in practice. Most of the time, according to Kuhn, science progresses in tiny steps, which refine and extend what is already 'known'. But occasionally experiments start to produce results that do not fit into existing theories and patterns.[6]

The result of this is a 'scientific revolution' which not only provides new theories, but which may also alter radically the way people see the world, and the kind of questions that scientists consider important to investigate. This combination of new theories and questions is referred to as a new paradigm - 'phenomenology' (Easterby-Smith et al.,

[6] Major scientific advances are not always produced by a logical and rational application of scientific method, e.g., the discovery of penicillin by Fleming.

1991). Easterby-Smith et al. attempt to summarise the main differences between the positivist and the phenomenological viewpoints (see Figure 4.1).

Figure 4.1

Key Features of Positivist and Phenomenological Paradigms

	Positivist paradigm	Phenomenological paradigm
Basic beliefs	• The world is external and objective • Observer is independent • Science is value-free	• The world is socially constructed and subjective • Observer is part of what observed • Science is driven by human interests
Researcher should:	• focus on facts • look for causality and fundamental laws • reduce phenomena to simplest elements • formulate hypotheses and then test them	• focus on meanings • try to understand what is happening • look at the totality of each situation • develop ideas through induction from data
Preferred methods include:	• operationalising concepts so that they can be measured • taking large samples	• using multiple methods to establish different views of phenomena • small samples investigated in depth or over time

Burrell and Morgan (1979) suggest that all approaches to research in the social sciences are based on interrelated sets of assumptions regarding ontology, human nature, and epistemology. Concerning the relationship between these issues and methodology, Morgan and Smircich (1980) provide us with a useful map[7] for overviewing different research methods. They argue that the dichotomy between qualitative and quantitative methods is a rough and oversimplified one. No research methods, whether qualitative or quantitative, can be considered or presented in the abstract, because the choice and adequacy of a method embodies a variety of assumptions regarding the nature of knowledge and the methods by which it can be obtained, as well as a set of assumptions about the nature of the phenomena to be investigated.

[7] See Morgan & Smircich (1980, p.492) for a review

4.3 Research Design with Experiments

The nature of experimental design is very different from exploratory or descriptive designs. The classic experimental design consists of two comparable groups: an experimental group and a control group. These two groups are equivalent except that the experimental group is exposed to the independent variable (also termed the treatment) and the control group is not. One measurement, the pre-test, is taken for all cases prior to the introduction of the independent variable in the experimental group; a second, the post-test, is taken for all cases after the experimental group has been exposed to the independent variable. The difference in measurements between post-test and pre-test is compared between the two groups.

This study is focusing on consumer groups' beliefs about the country and its products, and consumers' purchase willingness. The differences between consumer groups' beliefs of the country, its products and their purchase willingness are tested as sub-constructs of country of origin (COO) and country of target (COT). The consumer groups come from the different levels of economic development in countries.

Frankfort-Nachmias and Nachmias (1996) note that examining the effect of more than one independent variable requires a large number of experimental groups and a factorial design. Thus, by experimental test with experiments, this study investigates the differences of COT consumers' beliefs on four countries as COO and their products. (see Table 4.1).

In an effort to test the hypotheses presented in Chapter 3 and to generalise the findings, the present research employed the experimental groups with 4 x 4 design. Those groups act as a point of comparison with country of origin (COO) by country of target (COT). By using experimental groups, the experiment involved presenting subjects with pictures, descriptions and specifications of the car products. (see Appendix C for the experiment).

Table 4.1

An Experimental Design with Experiments

Country of Origin (COO) / Consumer Groups (COT)		More Developed Countries		Less Developed Countries	
		Germany	Italy	Korea	Malaysia
Europe	United Kingdom	UKGR	UKIT	UKKR	UKMA
America	United States	USGR	USIT	USKR	USMA
Asia	Hong Kong	HKGR	HKIT	HKKR	HKMA
Oceania	Australia	AUGR	AUIT	AUKR	AUMA

Informational copies of the product as brochure were prepared which included key features and specifications of the prototype car product. Data were collected within an 8 week timeframe from 4 experimental groups from each country. Subjects from four countries were asked to evaluate 19 items of country image and 12 items of car product attributes using a seven-point semantic differential scale. Subjects were also asked to respond to a question of purchase willingness as their attitudes toward the products and 6 items of general/ demographic content. At each session, the subjects responded to one country and its prototype automobile products using a pseudo country of origin.

4.3.1 Selection of Products and Countries

Some of the previous research has obtained "global" product evaluations asking subjects to rate "products from country X" generally (e.g., Nagashima, 1997), while some has focused on specific product categories (e.g., Kaynak and Cavusgil, 1983). It is well known that consumers classify products into categories (categorisation) and apply organised prior knowledge about the categories (schemas) to evaluate new products (Meyers-Levy and Tybout, 1989).

Papadopoulos (1993) noted that proponents of the product-specific stream argue that images vary across product categories, and therefore global evaluations are irrelevant. The reverse argument is that category-specific origin images cannot be generalised to the

overall image of an origin country, and that, conversely, if the product-specific argument is carried to its logical conclusion, then the images of categories are also irrelevant in relation to specific brands. Finally, Papadopoulos concludes that consumers have no difficulty attaching country images to any level of products, because the origin images of brands, companies, product categories, and all products from a given country represent various levels of abstraction [cf. Han's (1989) views).

As Urban et.al. (1996, p.47) noted, really-new products shift market structures, represent new technologies, require consumer learning, and induce behaviour changes. Thus, the selection of a car product as a prototype for this study is based on the following assumptions:(1) undergraduate students are likely to be familiar with the product, (2) the product is important enough to undergraduate students for them to have perceptions as product image, and (3) current brand names of car models were not used, and a prototype model was developed so that subjects' evaluations would not be biased by previous experiences or already formed brand perceptions.

Major research on product-country images has been conducted in mainly one country, the United States (Han and Terpstra, 1988; Hong and Wyer, 1990; Martin and Eroglu, 1993; Wang, 1978), although some has been conducted cross-nationally (Du Preez et al., 1994; Nagashima, 1970; Narayana, 1981; Papadopoulos et al., 1987; Roth and Romeo, 1992). For this study, the car products[8]- as a prototype model - were selected from four countries in two country categories which are in different stages of economic development and with dispersed socio-cultural characteristics - namely, Germany and Italy as developed countries, and Korea[9] and Malaysia as developing countries[10] (see Table 4.1).

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[8] Consumers are, particularly within the automobile product category, prone to using country of origin categories to streamline their decision making when the amount of attribute information is large and otherwise difficult to integrate (Huber and McCann, 1982; Strutton et al., 1994).

[9] In this study, this refers to South Korea only. North Korea has not exported any branded car products and is not recognised as a car manufacturing country in the world.

[10] Two categories are adopted from the World Bank. OECD (Organisation for Economic Co-operation and Development) and UNCTD (United Nations Conference on Trade and Development) based on the level of economic development of those countries. The indicators are often expressed in GDP per capita.

All four countries have indigenous car producers (e.g., Volkswagen in Germany, Fiat in Italy, Hyundai in Korea, and Proton in Malaysia). Specifically, product-country images tend to vary significantly between countries, and those images can influence consumers' attitudes and their purchase behaviour (Cattin, Jolibert and Lohnes, 1982; Han, 1989; Kamins and Nagashima, 1993; Nagashima, 1970, 1977; Martin and Eroglu, 1992).

The following two criteria (A, B) are used to choose four countries as country of origin and four countries as country of target using the OECD and EIU reports on each country as follows;

A. Level of economic development : this indicator is often quoted as GDP per head as shown in the reports. The three levels are;

(1) More developed countries: GDP per capita > $13,000
(e.g., USA, Germany, UK, Italy, Australia)

(2) Less developed countries: $13,000 > GDP per capita > $1,000
(e.g., Korea, Malaysia, South Africa, Hong Kong[11])

(3) Developing countries: GDP per capita < $1,000
(e.g., Nigeria, Zimbabwe)

B. Geographical areas: European and Asian countries are selected as country of origin for the product, and four continents, in terms of target markets, are selected as test-places to compare the consumers' perceptions toward origin countries and their car products, and to compare their product purchase willingness (see Table 4.2).

[11] Indicator of Hong Kong's GDP per head is over US$ 13.000. But the country belongs to NICs. as one of the Asian Tiger Countries- i.e., Korea. Singapore. and Taiwan.

Table 4.2

Country of Origin of Product and Test Countries[12]

	Country of Origin		To Be Tested	
	From	GDP per capita	In	GDP per capita
More Developed Countries*	Germany	29.500	Australia	19.240
	Italy	19.100	U K	18.875
			U S A	27.505
Less Developed Countries**	Korea	8.540	Hong Kong***	21.833
	Malaysia	3.627		

Notes : 1) Figures in US$ 2) * 1995 Indicators 3) ** 1994 Indicators 4)*** as one of NICs

Source : EIU Country Profiles

4.3.2 The Variables

What really affects consumers' attitudes toward products? What are the components of consumer beliefs about a country and its products? It is important to construct concepts determined by multiple item measures, or an overall evaluation of product-country images.

It is widely accepted that "image" essentially represents a collection and judgement of both intrinsic and extrinsic attributes of objects and classes of objects. Intrinsic attributes can range from the components of a product to the economic indicators of a country. Similarly, extrinsic attributes range from a product's price to an image of a country. In order to move from the conceptual to the empirical level of images, concepts are converted into variables. As we discussed in Chapter 2 and Chapter 3, the product-country images are converted into variables by translating them into a set of values.

[12] There are arguments about the choice of car product which could be a test of patriotism (i.e.. Strutton et al. 1994). Thus, in this study, different countries were selected as origin countries and test countries to avoid respondents' patriotic biased perceptions.

4.3.2.1 Country Image

The image of country plays a significant role in consumers' perceptions of products, and is one of the extrinsic attributes that may become part of a product's total image. Thus, defining and operationalisation of the dimensions of country image are necessary to conduct research in this area. A single measure of overall quality has typically been used to understand the impact of "made-in" stereotypes (e.g., Hong and Wyer, 1989; 1990). Others have used multidimensional operationalisations of country image (e.g., Cattin, Jolibert and Lohnes, 1982; Nagashima, 1970).

As Martin and Eroglu (1993) argued, there is as yet no validated instrument available to assess country image without tapping into the image of products from the respective country. However, such an approach seems to restrict the concept of country image in respect to consumer perceptions about countries' products, as well as feelings towards their people. The desired level of interaction between product and country images were found to be aspects of country stereotyping (e.g., Chao, 1989; Roth and Romeo, 1992; Morello, 1984).

A product's country of manufacture has been found to serve as a surrogate indicator and hence is a salient dimension of overall evaluation in the event that little else is known about the product (Cattin, Jolibert and Lohnes, 1982; Kamins and Nagashima, 1993; Schooler, 1965). Roth and Romeo (1992) noted that past country of origin research has often treated country quality as a summary construct, rather than as a defined set of dimensions from which quality is inferred. However, country image involves symbolic meaning, and is more than the overall quality evaluation or attributes such as technical advancedness, price-value, etc.

Although Roth and Romeo (1992) argued that the little research has indicated that country image is a multidimensional construct, country image has been consistently identified as a multi-dimensional concept (e.g., Cattin, Jolibert and Lohnes, 1982; Jaffe and Nebenzahl, 1984; Han and Terpstra, 1988; Johansson and Nebenzahl, 1986; White, 1979). Several analytic and multi-dimensional scaling studies have indirectly implied

some dimensions of country image across various countries (Johansson and Moinpour, 1977; Johansson et al., 1985).

As discussed in the previous Chapter, for this study, the country image construct is defined by four dimensions (see Table 4.3) whose domains are (1) political, (2) economic, (3) technological, and (4) socio-cultural desirability (e.g., Martin and Eroglu, 1993).

Table 4.3

Dependent and Independent Variables for Country Image

Dependent Variables	Independent Variables
Political	• environment • civilian Vs military • autocratic Vs democratic
Economic	• development • industrialisation • market system • environment
Technological Advancement	• quality • production system • technological research
Socio-cultural	• labour costs • literacy rate • welfare system • living standard

Country of origin studies have generally operationalised image as perceptions of products from a country: of overall quality, of its attributes, and/or of marketing and production properties of the country (Roth and Romeo, 1990). Thus, a valid operational measure may help resolve some of the methodological and conceptual issues raised in the area of country image research.

Martin and Eroglu (1993) noted the results of the factor analysis and further tests provided significant support for three, not four, underlying dimensions, because social desirability is captured by the three factors of economic, political, and technological aspects. They followed Churchill's (1979) procedures to capture the concept of country image. However, in this study country image is theoretically hypothesised to have four

dimensions which include a socio-cultural construct. The results of a factor analysis of the collected data are illustrated in the later part of this chapter.

4.3.2.2 Product Image

Johansson (1989) noted that country of origin effects are strongest for buyers with little or no product familiarity. The reasoning is that where little information on product attributes is stored in internal memory, more or less relevant indirect evidence (like country of origin) is employed to evaluate products and brands.

Recently, some of the research in the country of origin topic area has been conducted to test for the role of country image and subjects' beliefs about specific automobiles and their attributes (Anderson and Cunningham, 1972; Du Preez, Diamantopoulos, and Schlegelmilch, 1994; Erickson, Johansson, and Chao, 1984; Halfhill, 1980; Han, 1989; Johansson, Douglas, and Nonaka, 1985; Johansson and Nebenzahl, 1986; Johansson and Thorelli, 1985).

Using a system of simultaneous equations with automobiles as the target product, Johansson, Douglas, and Nonaka (1985) noted that the presence of a halo effect appeared to influence ratings on specific attributes. Erickson, Johansson and Chao (1984) examined only a single product, automobiles, for which considerable information is readily available and for which evaluations are likely to be based on some objective characteristics. An advantage of using automobiles is that the country of origin has become an important factor in this market. Also, country of origin is relatively easy to identify for this product class.

Han and Terpstra's (1988) finding suggests that though individual country image differs between product categories, the country image on specific product attributes can be generalised across product categories. Therefore, in this study, automobiles are selected for the illustrations because consumers are considered likely to be aware of the country

of origin of selected products.[13] Table 4.4 shows dependent and independent variables for the product image.

Table 4.4
Dependent and Independent Variables
for Product Image

Dependent Variables	Independent Variables
Quality	• quality in general
Prestige	• pride of ownership • class • brand recognition
Technical Advancedness	• advancement • workmanship • performance • technological design
Design	• styling • colour
Price	• price

4.3.2.3 Purchase Willingness

Some studies have investigated consumers' willingness to buy products from certain countries. For instance, Johansson et al. (1985) suggest that previous experience with a particular country and/or product category may influence the country of origin effect. Roth and Romeo (1992) found that willingness to buy a product from a particular country will be high when the country image is also an important characteristic for the product category.[14] Han (1989) also looked at the influence of patriotism on purchase willingness. Thus, in this study, prediction of willingness to buy is being investigated as a variable of consumer attitude to define the role of country image in product evaluations.

[13] In this study, the use of car products as a means of studying country image ignores the fact that some automobiles have parts produced in one country and assembled in others.

[14] Their findings noted that, when favourable matches exist, consumers' willingness to buy products can be enhanced by promoting country of origin (cell 1. Figure 2.1 in Chapter 2)

4.3.3 Subjects

Papadopoulos et al., (1990) argued that most earlier studies were not specifically focused on the question of domestic versus foreign products, and that there were methodological weaknesses which were often due to the inherent difficulties of conducting research in foreign countries (e.g., extensive use of convenience samples, such as students, lack of a transnational perspective, and inadequate conceptualisation - Bilkey and Nes, 1982).

It is rarely possible to contact all units in a population, so that a sample invariably has to be selected (Bryman and Cramer, 1990). Moreover, in order to be able to generalise to a wide population, a representative sample is required. As a primary objective of the study was to define the role of country image, as country of origin effects, convenience samples of undergraduate students are used. These samples also can be viewed as nationally representative to compare consumers' evaluations of the prototype car products from four origin countries.

The use of student samples in consumer research is commonly disparaged and pointed at as reason to doubt the generalisability of research results. But Liefeld's (1993) results of the meta-analysis do not support this view. Liefeld concluded that if the products employed in experiments are products which students use and which are part of their consumer realities, then the use of student samples is clearly appropriate (1994, p.148). Undergraduate students also provide an invaluable contribution to the study, because they are the prospective buyers in the near future and are familiar with the car products. Undergraduate students have been commonly used in such studies in the past (Eroglu and Machleit, 1989; Hong and Wyer, 1990; Thorelli et al., 1989).

Sample size primarily depends upon the degree of accuracy that is needed, i.e. how representative is the sample of the population with respect to the characteristics/ variables of interest. The accuracy will depend upon two characteristics of that population for which the sample is to stand proxy: (a) Degree of variability in the population: populations which have high degrees of heterogeneity require larger samples

than those populations which are more homogeneous. (b) The presence of population sub-groups: the sample must be large enough to allow a valid analysis of any sub-groups that may be present in the population. The sample size of 320 undergraduate students is adequate for this study at the 95% confidence interval (Churchill, Jr., 1995). Respondent characteristics are shown in Table 5.1 in Chapter 5.

The subjects consist of 320 undergraduate students from 4 countries (see Table 5.1). It consists of 80 students who are all in business study classes from the Curtin University of Technology at Perth in West Australia, 80 second year undergraduate students from marketing subject classes at the Hong Kong Baptist University, 80 undergraduate students at the University of Reading in the UK, and 80 undergraduate students from the University of San Francisco in the United States.

4.3.4 Questionnaire Design

Questionnaires are structured lists of questions which are asked directly to the respondent to investigate their attitudes, beliefs, feelings, knowledge about countries and products, and demographic characteristics. The questionnaire was drawn up in English. It was not necessary to translate English into another language version and then back-translate into English to identify errors (Douglas and Craig, 1983) because all subjects use English as their native or official language.

The questionnaire consists of 38 questions in three parts (see Table 4.5). In the first part, each country has to be evaluated with four dimensions of country image utilising Nagashima's seven-point semantic differential scales. The second part involved the evaluation of five attributes of car products and purchase willingness of products using Nagashima's seven-point scales with a visual information brochure of a prototype automobile product. The last part included questions about product familiarity, ownership, usage of car, and socio-demographics. The subjects are asked to circle on the scale from 1 to 7, or to tick the appropriate box to give the best reflection of their perceptions.

Table 4.5

Questions on Product-Country Images

		Dimensions/Attributes	Questions
Country Image (19)	General Knowledge about the country		• country, • PETS (4)
	Beliefs on	Political	• environment • civilian Vs military • autocratic Vs democratic
		Economic	• development • industrialisation • market system • environment
		Technological	• quality • production system • technological research
		Socio-cultural	• labour costs • literacy rate • welfare system • living standard
Product Image (12)	Interests on the product		• interests
	Beliefs on	Quality	• quality in general
		Prestige	• pride of ownership • class • brand recognition
		Technology	• advancement • workmanship • performance • Technological design
		Design	• styling • colour
		Price	• price
Attitude (1)		Willingness	• purchase intention
General (6)		Car Product & Demographic	• knowledge. ownership etc. • sex. age

From a theoretical standpoint researchers in the area of country image effects have become increasingly sensitive to its theoretical and methodological dimensions. Although Martin and Eroglu (1993) argued that there is no validated scale for measuring country image per se, the Nagashima scale is widely quoted and utilised in studies of product-country images (i.e., Canttin, Jolibert and Lohnes, 1982; Han, 1989; Han and Terpstra, 1988; Jaffe and Nebenzahl, 1984; Lillis and Narayana, 1974; Martin and Eroglu, 1992; Narayana, 1981; White, 1979).

4.3.4.1 Development of Experiments : The Product Brochure

The experiments on the prototype car product were developed to stimulate respondents to answer the questionnaire on product image. The brochure was based on a hypothetical model which is being developed in a car manufacturer's engineering design centre in the UK. The brochure consists of the text for product development, illustrations of the model, key features of the car and vehicle specifications.[15] The brand was named as "XV2000" for the product supposedly coming, for the millennium, from the countries of origin. Identical contents of the brochure were applied to all countries as country of origin.

The text reads as follows "our brief was to develop a high performance, low environmental impact car utilising the most advanced technology. After 5 years of intensive research and development the XV2000 was born. The car brings together in perfect harmony: an ultra-efficient ceramic engine which utilises a Compressed Natural Gas (CNG) direct injection fuelling system. This power unit achieves near zero emission of environmentally harmful substances. Extensive use has been made of aluminium-alloy in the chassis, suspension and body, which has resulted in a 40% weight reduction over traditional car construction materials. Advanced driver control systems are integral to the design. These include: drive by wire, head-up display instrumentation, all wheel drive and steer, and satellite navigation. The XV2000 is designed to maximise passenger safety and comfort. The bodyshell is many times more rigid than conventional designs, and the passenger compartment is encased by a patented energy dissipating system which has been shown to absorb impact much more effectively than conventional protection bars and crumple zones. For the driver, the vehicle's advanced electronic control systems, chassis and suspension combine to enable the utilisation of the car's high performance across a wide range of weather and road conditions. The XV2000 is designed to minimise environmental impact. The engine is over 75% more efficient that conventional engines of similar power. The extensive use of alloys means that 90% of the car can be economically recycled. The XV2000 provides safety and high performance with minimum environmental impact".

The key features of the product are (a) ultra-efficient ceramic engine, (b) Compressed Natural Gas (CNG) fuel, (c) direct injection fuelling system, (d) near zero emission technology, (e) aluminium-alloy chassis and body, (f) active ride suspension, (g) advanced driver control systems: drive by wire, head-up display instrumentation, all

[15] See Appendix C for details on the vehicle specification.

wheel drive and steer, satellite navigation, and fully electronic vehicle controlling system, and (h) over 90% of component recyclability.

4.3.5 Data Collection Procedure

The subjects were provided with a set of questionnaires pertaining to their beliefs on the country and its products, and purchase willingness toward the car products. In an effort to test the hypotheses presented in Chapter 3, the present research used experimental groups with a 4 x 4 design. By using experimental groups, we controlled most of the intrinsic and extrinsic factors that could threaten the validity of the experiment. The experiment involved presenting subjects with car product descriptions (i.e., a brochure for the prototype car products). Data was collected from 4 groups from each country. The following instructions were given on the letters to administrators to conduct the survey properly as Appendix A.

INSTRUCTIONS

A. Subject Grouping

1. About 100 subjects (undergraduate students) should be split into 4 groups.
2. Each group consists of around 25 subjects.
3. Each group answers a particular country's questionnaire (e.g., 1 group does Korea, another Italy and so forth) and for the product supposedly coming from that country. As you will see, the questionnaires are actually identical, with the only variable being the country's name, and the implicit suggestion that the experimental car we're studying comes from that country.

B. Steps for Data Collection

First Distribute the Country Image Questionnaires

1. Distribute the questionnaires of country image,

2. Allow about 5 minutes to answer, and then
3. Collect the questionnaires.

Now Distribute the Brochure and the Product Image Questionnaire, MAKING SURE that each group gets the brochure and product image questionnaire that matches the country for which they have previously answered the Country Image Questionnaire. I.E. Korea group gets Korea brochure and product image questionnaire.

1. Distribute the brochure of the car product, and allow about 5 minutes to read it carefully.
2. Distribute the questionnaire on product image
3. Allow about 5 minutes to answer, and then
4. Collect the questionnaires

Please apply the same procedures to each group.

Subjects were asked to evaluate four countries on each of 19 country image items under four country image dimensions - political, economic, technological advancement, and socio-cultural, and its car product attributes of 12 items using a seven-point semantic differential scales (e.g., 1=unreliable; 7=reliable). Subjects were also asked to answer the question of purchase willingness. At each session, the subjects responded to one country and its car product using the hypothetical product brochure with descriptions.

4.4 Data Coding and Editing

As discussed earlier, a total of 320 subjects participated in the experiment. Upon completion of the experiment, data was transferred from the questionnaires to the computer for further data analysis. The data was keyed in by an operator other than the principal researcher. Prior to the data input a unique number was placed on the top right-

hand corner of each questionnaire (i.e., AU-CG-01 or AU-PG-01)[16] in order to identify all entries easily. Following the completion of data entry, a cross examination was made for data input confirmation between questionnaires and output data. With completion of data input by sorting of country of target (COT) and country of origin (COO) on the Excel programme, all data was transferred to the Statistical Package for the Social Sciences (SPSS) data analysis programme for the application of various techniques.

4.5 Instrument Reliability

Reliability is defined by Green, Tull, and Albaum (1988) as the extent to which scaling results are free from experimental error. Kerlinger (1986) defines reliability as the accuracy or precision of a measuring instrument. Assessment of reliability of instruments was scarce in the field of marketing research till the 1970s (Jacoby, 1976; Peter, 1979). Peter (1979) strongly recommended a change to this trend and offered the following solutions (p.16):

- develop multi-item scales to measure constructs for appropriate reliability and validity;
- use coefficient alpha to assess the reliability of measurement scales in marketing research.

From the beginning of the 1980s, assessment of reliability of multi-item scales in marketing research became popular (Peter and Churchill, Jr., 1986). In accordance with Peter's (1979), Churchill, Jr.'s, (1995), and Green, Tull and Albaum's (1988) recommendations, the country image and product image consisted of 19 and 12 items respectively, and Cronbach's (1951) coefficient alpha, which is the most commonly accepted formula for assessing reliability (Churchill, Jr., 1995; Jaffe and Nebenzahl, 1984; Peter, 1979) was determined for the country image and product image instruments. The statistics generally supported the reliability of the instrument as is shown Table 4.6, with the obvious exceptions of economic development,

[16] AU stands for test Country of Australia. CG for country of origin from Germany. PG for product from Germany and 01 for respondent's number.

industralisation, government style and political system (α = .65, α = .66, α = .59, α = .59) for country image, and product interest and purchase willingness (α = .47, α = .36) for product image, respectively.

Table 4.6

Reliability Statistics Obtained from the Study

Country Image as Beliefs		Cronbach's Alpha
Development (α = .87)		
	product quality in general	.86
	technological research	.86
	labour costs	.86
	literacy rate	.85
	welfare system	.86
	living standards	.83
Knowledge (α = .92)		
	general knowledge	.89
	politics	.90
	economy	.88
	technological advancement	.91
	socio-culture	.90
Economic (α = .76)		
	economic development	.65
	industrialisation	.66
	economic environment	.72
	mass production system	.78
Government (α= .73)		
	politic environment	.76
	government style	.59
	political system	.59
	market system	.70
Product Image as Beliefs		**Cronbach's Alpha**
New Product (α = .90)		
	overall quality	.89
	pride of ownership	.89
	social class	.89

(Continued)

(Continued)

	technical advancement	.89
	workmanship	.88
	performance	.88
	technological design	.88
	styling	.90
	colour	.90
	price	.89
Interests (α = .63)		
	product interest	.47
	brand recognition	.70
	purchase willingness	.36

4.6 Instrument Validity

As Peter (1979, p.6) noted, valid measurement is the *sine qua non* of science. In a general sense, validity refers to the degree to which instruments truly measure the constructs which they are intended to measure. The following aspects of the country image and product image instruments' validity were assessed: convergent and discriminant, for the items included in the country image and product image scales used in this study were identified from the literature.

4.6.1 Convergent Validity

Convergent validity for the country image and product image measures is provided by the extent to which it correlates highly with other methods designed to measure the same construct (Churchill, Jr., 1979). The regression of the constructs on a related independent measure shows an R^2 = .69 for country image, and an R^2 = .45 for product image, significant at level of $p < .01$. The statistics are summarised in Table 4.7.

Table 4.7

Convergent Validity Statistics Obtained from the Study

Multiple Regression for Country Image (Dependent Variable: General Knowledge about the Country; Independent Variables: 18 Variables)

Multiple R	.83366
R Square	.69498
Adjusted R Square	.67674
Standard Error	.77140

Analysis of Variance

	DF	Sum of Squares	Mean Square	F	Sig. F
Regression	18	408.10935	22.67274	38.10172	.0000
Residual	301	179.11252	.59506		

Multiple Regression for Product Image (Dependent Variable. Interest on the Products; Independent Variables: 12 Variables)

Multiple R	.67256
R Square	.45233
Adjusted R Square	.43093
Standard Error	1.19162

Analysis of Variance

	DF	Sum of Squares	Mean Square	F	Sig. F
Regression	12	360.04463	30.00372	21.13000	.0000
Residual	307	435.92725	1.41996		

4.6.2 Discriminant Validity

Discriminant validity was determined by factor analysis, under the assumption that each of the country image factors and product image factors would not correlate very highly with another factor from which it should have differed (Campbell, 1960). The results of the tests supported the validity of the instruments and are shown in Table 4.8 and in Table 4.9, respectively.

As discussed earlier, the research instruments were developed using thirty-two variables on product-country images and consumers' purchase willingness which were identified from the previous literature review. Nineteen variables were used to measure country image. Twelve variables were used to measure product image, and one variable as purchase willingness was used to measure respondents' attitudes toward products.

4.6.2.1 Evaluation of Country Image Variables

The first application of factor analysis was conducted on the measurement of nineteen variables for country images. The analysis of the country image data produced a 4 factor solution which was subjected to principal components factor analysis. The first four factors explained 37.2%, 15.3%, 7.3% and 6.9% of the variance, respectively. The last fifteen factors explained only from 4.4% to .7%. Then, the four factors were rotated using varimax rotation. These factors were named "development" of the country, "knowledge" about the country, "economic" and "government" of the country. These factors with constituents are presented in Table 4.8.

4.6.2.2 Evaluation of Product Image Variables

The second application of factor analysis was conducted on the twelve variables for product images and one variable for consumers' purchase willingness. The analysis of the product image data produced a two factor solution which was subjected to principal components factor analysis. The first two factors explained 45.5 and 10.5% of the variance, respectively. The last eleven factors explained only from 6.8% to 1.9%. Then, the two factors for product image were rotated using varimax rotation. These factors were named "new product," and "recognition." These factors with constituents are presented in Table 4.9.

A general correlation from the factor analysis proves us that the instrument used possesses nomological and discriminant validity - items expected to load together indeed did so. Varimax rotation ensures that the factors are orthogonal, and are therefore unrelated, or "distinct."

Table 4.8

Factor Loadings of Country Image Variables

(n = 320)

Variables	Factor 1	Factor 2	Factor 3	Factor 4
Development				
product quality in general	.77			
technological research	.64			
labour costs	.77			
literacy rate	.70			
welfare system	.67			
living standard	.84			
Knowledge				
general knowledge		.85		
politics		.86		
economy		.89		
technological advancement		.80		
socio-culture		.84		
Economic				
economic development			.58	
industrialisation			.66	
economic environment			.55	
mass production system			.78	
Government				
politic environment				.46
government style				.82
political system				.79
market system				.56
Eigenvalue	7.07	2.91	1.40	1.30
Variance Explained	37.2	15.3	7.3	6.9

Table 4.9

Factor Loadings of Product Image Variables

(N = 320)

Variables	Factor 1	Factor 2
Product		
overall quality	.62	
pride of ownership	.74	
social class	.75	
technical advancement	.73	
workmanship	.78	
performance	.72	
technological design	.75	
styling	.58	
colour	.59	
price	.76	
Interests		
product interest		.73
brand recognition		.62
purchase willingness		.81
Eigenvalue	5.92	1.37
Variance Explained	45.5	10.5

4.7 Procedures and Descriptive Statistics

Before testing the hypotheses, a brief discussion on the procedures and descriptive statistics for the variables is in order. Table 4.10 shows an analysis matrix (4 x 4)[17] which is developed to compare the differences between two levels of economic development of countries as country of origin and the 4 test countries which represent each continent as country of target.

[17] 4x4 stands for two levels of economic development-More Developed Country (MDC) and Less Developed Country (LDC) as product origin country and 4 test countries from each continent. Europe. America, Asia, and Oceania as target markets.

Table 4.10

Analysis Matrix for Product-Country Images

and Purchase Willingness

Country of Origin (**COO**) / Country of Target (**COT**)	More Developed Countries				Less Developed Countries			
	Germany		Italy		Korea		Malaysia	
United Kingdom	1	UKGR	2	UKIT	3	UKKR	4	UKMA
United States	5	USGR	6	USIT	7	USKR	8	USMA
Hong Kong	9	HKGR	10	HKIT	11	HKKR	12	HKMA
Australia	13	AUGR	14	AUIT	15	AUKR	16	AUMA

Notes: 1) More Developed Countries (MDC); Australia, Germany, Italy, United Kingdom, USA

2) Less Developed Countries (LDC); Hong Kong, Korea, Malaysia

The first procedure, MANOVA with repeated measures on the country image variables and product image variables was used for two steps of the analysis. MANOVA was used to examine if there were significant overall differences within subjects' beliefs on countries and their products. If significant overall differences were found, then in the second step, the researcher looked into the univariate analyses for further examination of significant differences in each of variables of product-country images.

The results of the multivariate analysis of variance (MANOVA) tests are presented in the order of appearance of the hypotheses. For purposes of hypothesis tests, the hypotheses presented in this study were expressed in the null form. The significance level of less than .05 was used to reject null hypotheses and to support alternate hypotheses. Descriptive mean statistics of the variables for country image and product image used in this study are provided in Table 4.11 and Table 4.12 respectively.

The second procedure, one-way analysis of variance (ANOVA), was used to examine whether significant differences existed between the subject groups as country of target (COT) which are United Kingdom, United States, Hong Kong and Australia, and between the four product origin countries as country of origin (COO) which are Germany, Italy, Korea and Malaysia.

Table 4.11

Descriptive Statistics for Country Image Variables Used in this Study

VARIABLES	Mean	Std Err	Median	Std Dev
Knowledge about the Country (C1)	2.66563	.076	2.000	1.357
Knowledge about Politics (C2)	2.12500	.072	2.000	1.290
Knowledge about Economy (C3)	2.40313	.080	2.000	1.435
Knowledge about Tech. Advance. (C4)	2.56875	.082	2.000	1.463
Knowledge of Socio-Culture (C5)	2.84688	.084	3.000	1.506
Political Stability (C6)	3.36563	.079	3.000	1.421
Government Style (C7)	3.93438	.086	4.000	1.539
Political System (C8)	3.93438	.086	4.000	1.547
Economic Development (C9)	4.78750	.072	5.000	1.284
Industrialisation (C10)	4.71250	.072	5.000	1.288
Market System (C11)	4.27187	.074	4.000	1.331
Economic Environment (C12)	4.48750	.064	4.500	1.147
Product Quality (C13)	4.88750	.073	5.000	1.306
Production System (C14)	4.61250	.068	5.000	1.209
Technological Research (C15)	4.43125	.069	4.000	1.235
Labour Costs (C16)	3.62813	.076	4.000	1.365
Literacy Rate (C17)	4.34375	.079	4.000	1.406
Welfare System (C18)	3.90313	.074	4.000	1.330
Living Standard (C19)	4.36250	.072	5.000	1.289

Table 4.12

Descriptive Statistics for Product Image Variables Used in this Study

VARIABLES	Mean	Std Err	Median	Std Dev
Interest (P1)	4.49062	.088	5.000	1.580
Overall Quality (P2)	5.16875	.063	5.000	1.124
Pride of Ownership (P3)	5.17188	.069	5.000	1.234
Social Class (P4)	5.18125	.061	5.000	1.088
Brand Recognition (P5)	3.69688	.083	4.000	1.489
Technical advancement (P6)	5.55625	.058	6.000	1.046
Workmanship (P7)	5.25000	.062	5.000	1.114
Performance (P8)	5.21875	.057	5.000	1.027
Technological Design (P9)	5.42500	.061	5.000	1.095
Styling (P10)	5.17812	.071	5.000	1.268
Colour (P11)	4.97813	.062	5.000	1.113
Price (P12)	5.10000	.062	5.000	1.230
Buying Willingness (P13)	3.47813	.088	4.000	1.570

4.8 Summary

This chapter dealt with the methods used for the study. The chapter began with the nature of research of this study. This study is an experimental *ex post facto* laboratory study using a set of questionnaires to collect data from a controlled convenience sample. An overview of methodological issues in research design was made to build up a fundamental understanding of research design.

The second part of this chapter illustrated the experimental research design for this study which included selections of product and country, derivation of variables for country image, product image and purchase willingness. It also consisted of a selection of subjects, questionnaire design, data collection procedures, and data coding and editing. In the third part, factor analyses were conducted for the evaluations of country image variables and product image variables. The reliability and validity of the instruments were also established. Finally, this chapter presented descriptive statistics and the procedures of data analysis for the following two chapters.

In the next chapter, hypotheses will be tested through Multivariate Analysis of Variance (MANOVA). MANOVA results will be provided in the order of country of target (COT) and country of origin (COO), and country image, product image and purchase willingness.

Chapter 5

Data Analysis and Results

5.1 Introduction

The purpose of this chapter is to present research findings, as results of hypothesis tests, of the consumer groups' beliefs on the country, its products, and their purchase willingness toward the prototype automobiles. In the first section, characteristics of respondents are briefly summarised. Next, as one of the main analytic procedures, the results of multivariate analysis of variance of two constructs will be presented by country of target (COT) and by country of origin (COO). The two constructs are explained by sub-constructs of country image, product image, and consumers' purchase willingness of the products.

Multivariate and univariate statistics are followed by tests for individual variables of three sub-constructs. The first part of this section is for the tests of hypotheses 1.1.1 to 1.1.19 for country image by COT and of the hypotheses 1.2.1 to 1.2.19 for country image by COO. In the second part, the hypotheses 2.1.1 to 2.1.12 for product image by COT and the hypotheses 2.2.1 to 2.2.12 for product image by COO were tested. The third part of this section concerns the test of consumer groups' attitude toward the prototype car products as hypotheses 3.1.1 and 3.2.1. The test results are summarised as tables (see Table 7.3 and Table 7.4 in Chapter 7). Finally, the results of post-hoc tests are also presented at the end of this chapter.

5.2 Respondent Characteristics

Characteristics of the sample are summarised in Table 5.1 below for quick reference. There were 320 junior and senior undergraduate students from 4 countries who

responded to the questionnaires. The sample consisted of 37.8% males and 62.2% females. In particular, the Hong Kong sample consisted of only 20% male respondents. While 32.2% of the subjects are 20 years old or under, 66.9% belonged to the age group 21 to 30 years, and only .9% of the sample were 31 or over.

Table 5.1

Characteristics of the Sample

	Total	United Kingdom	United States	Hong Kong	Australia
20 or younger	32.2	22.5	22.5	40.0	43.8
Age (%) 21 to 30	66.9	77.5	77.5	60.0	52.5
31 or Over	.9				3.7
Sex (% male)	37.8	48.8	52.5	20.0	30.0
Car owners (%)	51.9	46.3	81.3	1.3	78.8
Level of knowledge of cars*	3.928	4.125	4.800	2.575	4.212
Frequency of car usage*	4.669	4.825	6.038	1.800	6.012
Information seeking of cars*	3.341	3.275	4.475	2.288	3.687
No. of respondents	320	80	80	80	80

Note : * Mean of respondents (scale: very low or very seldom. 1 - very high or very often. 7)

Information on car product familiarity was also collected from the respondents. The level of familiarity of car products varied among the countries. There was also a variety of levels of car ownership. 81.3% of United States respondents owned a car while only 1.3% of Hong Kong respondents owned cars. The level of knowledge about cars also differs among the respondent groups. The mean of the United States group was 4.800, Australia was 4.212, United Kingdom was 4.125, and Hong Kong was 2.575. The total mean of the level of knowledge about cars was 3.928. This indicates that the level of knowledge about cars is correlated with the level of car ownership.

The mean of respondents' frequency of car usage were 6.038 in United States, 6.012 in Australia, 4.825 in United Kingdom, and 1.800 in Hong Kong. The level of information seeking about cars is 4.475 in United States, 3.687 in Australia, 3.275 in United Kingdom, and 2.288 in Hong Kong. This indicates that the level of car usage correlates with the level of information seeking about cars.

5.3 Multivariate Analysis of Variance (MANOVA)

The following are the results of the MANOVA tests for country image and product image by country of target (COT) by country of origin (COO). MANOVA tests are applied for a generalisation of the two constructs, COT and COO. These results are presented in Table 5.2 for country image and in Table 5.5 for product image. The detailed results of the multivariate and univariate analyses of variance for the two constructs are shown in Table 5.3 for country image by COT, in Table 5.4 for country image by COO, in Table 5.6 for product image by COT and in Table 5.7 for product image by COO.

5.3.1 Country Image Tests

The primary focus of this study is to empirically identify the differences between consumer groups' perceptions on the origin countries and their products. The MANOVA tests on country image by COT by COO indicate a difference at the significance level of .05. Since a null hypothesis was specified, univariate analyses were conducted for further explanation of group differences on each of the variables of country image. Table 5.2 shows the results of multivariate tests on country image variables between the groups by COT by COO.

Table 5.2

Multivariate and Univariate Analyses of Country Image Variables

Between Groups by COT by COO

I. Overall Multivariate Tests of Significance (S = 9, M = 4 1/2, N = 142)

		F-VALUE	SIG of F
Pillais *V*	.82592	1.56348	.000
Hotellings	.95777	1.59193	.000
Wilks' Λ	.41155	1.58038	.000
Roy's GCR	.21349		

II. Univariate F-Tests with (9, 304) D.F.

Variable	C1	C2	C3	C4	C5	C6	C7
F-Value	2.92431	2.17148	2.78656	1.13372	2.76667	2.44368	1.90250
Sig. of F	.002	.024	.004	.338	.004	.011	.051

Variable	C8	C9	C10	C11	C12	C13	C14
F-Value	2.26781	3.05043	3.01343	1.03568	2.33092	1.87543	.83135
Sig. of F	.018	.002	.002	.411	.015	.055	.588

Variable	C15	C16	C17	C18	C19
F-Value	2.59073	2.23561	5.38721	2.86939	4.74114
Sig. of F	.007	.020	.000	.003	.000

Obviously, it is necessary to interpret the meaning of group differences on the set of variables for the country image by COT and COO.

5.3.1.1 Country Image Tests by COT

The results of MANOVA tests for country image by COT are shown in Table 5.3. In a table of the F distribution, the critical F for 3 and 304 degrees of freedom and alpha level of .05 is 2.60. Thus, there are statistically significant differences at the .05 level between the groups for each variable considered separately. Those variables are C1, C2, C3, C4, C5, C6, C9, C10, C12, C13, C14, C15, C16, C17, and C18. These results are presented with the hypotheses.

Table 5.3

Multivariate and Univariate Analyses of Country Image Variables

Between Groups by COT

VARIABLE	F-VALUE	SIG of F	MEANS			
			UK	US	HK	AU
I. Overall Multivariate Tests of Significance (S = 3, M = 7 1/2, N = 142)						
Pillais *V*	.48509	2.92377	.000			
Hotellings	.60057	2.99936	.000			
Wilks' Λ	.58368	2.96360	.000			
Roy's GCR	.22751					
II. Univariate F-Tests with (3, 304) D.F.						
Knowledge about the Country (C1)	9.32377	.000	2.6375	3.2500	2.2000	2.5750
Knowledge about Politics (C2)	4.97437	.002	2.0500	2.5125	1.7625	2.1750
Knowledge about Economy (C3)	5.52991	.001	2.3875	2.8750	2.0000	2.3500
Knowledge of Tech. Advance. (C4)	4.54249	.004	2.6625	2.9375	2.1250	2.5500
Knowledge of Socio-Culture (C5)	4.28551	.006	2.8125	3.2125	2.4125	2.9500
Political Stability (C6)	7.07816	.000	3.6125	3.9625	3.1250	3.2125
Government Style (C7)	2.15456	.093	4.0750	4.1000	3.5875	3.9750
Political System (C8)	2.58453	.053	4.2000	3.8750	3.6000	4.0625
Economic Development (C9)	6.97100	.000	4.9875	5.1000	4.3125	4.7500
Industrialisation (C10)	7.57950	.000	4.9375	4.9750	4.2125	4.7250
Market System (C11)	.90583	.439	4.1875	4.4750	4.1875	4.2375
Economic Environment (C12)	5.32357	.001	4.5500	4.8625	4.3000	4.2375
Product Quality (C13)	4.30203	.005	4.7125	5.2375	4.7250	4.8750
Production System (C14)	6.69029	.000	5.0375	4.6375	4.2250	4.5500
Technological Research (C15)	4.78688	.003	4.6750	4.5250	4.0500	4.4750
Labour Costs (C16)	2.88908	.036	3.3875	3.9000	3.6375	3.5875
Literacy Rate (C17)	5.44177	.001	4.5625	4.6500	4.0000	4.1625
Welfare System (C18)	3.82831	.010	3.7500	4.1625	4.0875	3.6125
Living Standard (C19)	1.97210	.118	4.1375	4.5625	4.3875	4.3625

Note: ▒▒ indicates that **the null hypotheses were rejected** at .050 level.

Null Hypothesis 1.1.1 There is no significant difference between subject groups' level of general knowledge about the countries of origin.

Alternate Hypothesis 1.1.1 There is a significant difference between subject groups' level of general knowledge about the countries of origin.

The results indicated a significant difference between the consumer groups at the .050 level, with an F-value of 9.32377, significant at .000. The group means were 3.2500 in United States and 2.6375 in United Kingdom while Hong Kong was 2.2000. Therefore the null hypothesis was rejected and the alternate hypothesis was supported.

Null Hypothesis 1.1.2 There is no significant difference between subject groups' level of general knowledge about the politics of the origin countries.

Alternate Hypothesis 1.1.2 There is a significant difference between subject groups' level of general knowledge about the politics of the origin countries.

The results indicated a significant difference between the consumer groups at the .050 level, with an F-value of 4.97437, significant at .002. The group means were 2.5125 in United States and 2.1750 in Australia while Hong Kong was 1.7625. Therefore the null hypothesis was rejected and the alternate hypothesis was supported.

Null Hypothesis 1 1.3 There is no significant difference between subject groups' level of general knowledge about the economy of the origin countries.

Alternate Hypothesis 1.1.3 There is a significant difference between subject groups' level of general knowledge about the economy of the origin countries.

The results indicated a significant difference between the consumer groups at the .050 level, with an F-value of 5.52991, significant at .001. The group mean of United States was 2.8750 while Hong Kong was 2.0000. Therefore the null hypothesis was rejected and the alternate hypothesis was supported.

Null Hypothesis 1.1.4 There is no significant difference between subject groups' level of general knowledge about the technological advancement of the origin countries.

Alternate Hypothesis 1.1.4 There is a significant difference between subject groups' level of general knowledge about the technological advancement of the origin countries.

The results indicated a significant difference between the consumer groups at the .050 level, with an F-value of 4.54249, significant at .004. The group mean of United States was 2.9375 while Hong Kong was 2.1250. Therefore the null hypothesis was rejected and the alternate hypothesis was supported.

Null Hypothesis 1.1.5 There is no significant difference between subject groups' level of general knowledge about the socio-culture of the origin countries.

Alternate Hypothesis 1.1.5 There is a significant difference between subject groups' level of general knowledge about the socio-culture of the origin countries

The results indicated a significant difference between the consumer groups at the .050 level, with an F-value of 4.28551, significant at .006. The group means were 3.2125 in United States and 2.9500 in Australia while Hong Kong was 2.4125. Therefore the null hypothesis was rejected and the alternate hypothesis was supported.

Null Hypothesis 1.1.6 There is no significant difference between subject groups' perceptions about the stability of political environment of the origin countries.

Alternate Hypothesis 1.1.6 There is a significant difference between subject groups' perceptions about the stability of political environment of the origin countries.

The results indicated a significant difference between the consumer groups at the .050 level, with an F-value of 7.07816, significant at .000. The group mean of United States was 3.9625 while Hong Kong was 3.1250. Therefore the null hypothesis was rejected and the alternate hypothesis was supported.

Null Hypothesis 1.1.7 There is no significant difference between subject groups' perceptions about the government style of the origin countries.

Alternate Hypothesis 1.1.7 There is a significant difference between subject groups' perceptions about the government style of the origin countries.

The results indicated no significant difference between the consumer groups at the .050 level, with an F-value of 2.15456, significant at .093. Therefore the null hypothesis was accepted and the alternate hypothesis was rejected.

Null Hypothesis 1 1.8 There is no significant difference between subject groups' perceptions about the political system of the origin countries.

Alternate Hypothesis 1.1.8 There is a significant difference between subject groups' perceptions about the political system of the origin countries.

The results indicated no significant difference between the consumer groups at the .050 level, with an F-value of 2.58453, significant at .053. Therefore the null hypothesis was accepted and the alternate hypothesis was rejected.

Null Hypothesis 1.1.9 There is no significant difference between subject groups' perceptions about the level of economic development of the origin countries.

Alternate Hypothesis 1.1.9 There is a significant difference between subject groups' perceptions about the level of economic development of the origin countries.

The results indicated a significant difference between the consumer groups at the .050 level, with an F-value of 6.97100, significant at .000. The means were 5.1000 in United States, 4.9875 in United Kingdom and 4.7500 in Australia while Hong Kong was 4.3125. Therefore the null hypothesis was rejected and the alternate hypothesis was accepted.

Null Hypothesis 1.1.10 There is no significant difference between subject groups' perceptions about the level of industrialisation of the origin countries.

Alternate Hypothesis 1.1.10 There is a significant difference between subject groups' perceptions about the level of industrialisation of the origin countries.

The results indicated a significant difference between the consumer groups at the .050 level, with an F-value of 7.57950, significant at .000. The group means were 4.9750 in United States, 4.9375 in United Kingdom and 4.7250 in Australia while Hong Kong was 4.2125. Therefore the null hypothesis was rejected and the alternate hypothesis was accepted.

Null Hypothesis 1.1.11 There is no significant difference between subject groups' perceptions about the market system of the origin countries.

Alternate Hypothesis 1.1.11 There is a significant difference between subject groups' perceptions about the market system of the origin countries.

The results indicated a significant difference between the consumer groups at the .050 level, with an F-value of .90583, significant at .439. Therefore the null hypothesis was accepted and the alternate hypothesis was rejected.

Null Hypothesis 1.1.12 There is no significant difference between subject groups' perceptions about the stability of economic environment of the origin countries.

Alternate Hypothesis 1.1.12 There is a significant difference between subject groups' perceptions about the stability of economic environment of the origin countries.

The results indicated a significant difference between the consumer groups at the .050 level, with an F-value of 5.32357, significant at .001. The group mean was 4.8625 in United States while Australia was 4.2375. Therefore the null hypothesis was rejected and the alternate hypothesis was accepted.

Null Hypothesis 1.1.13 There is no significant difference between subject groups' perceptions about the general quality of products of the origin countries.

Alternate Hypothesis 1.1.13 There is a significant difference between subject groups' perceptions about the general quality of products of the origin countries.

The results indicated a significant difference between the consumer groups at the .050 level, with an F-value of 4.30203, significant at .005. The group mean was 5.2375 in United States while United Kingdom was 4.7125. Therefore the null hypothesis was rejected and the alternate hypothesis was accepted.

Null Hypothesis 1.1.14 There is no significant difference between subject groups' perceptions about the mass production system of the origin countries.

Alternate Hypothesis 1.1.14 There is a significant difference between subject groups' perceptions about the mass production system of the origin countries.

The results indicated a significant difference between the consumer groups at the .050 level, with an F-value of 6.69029, significant at .000. The group means were 5.0375 in United Kingdom and 4.6375 in United States while Hong Kong was 4.2250. Therefore the null hypothesis was rejected and the alternate hypothesis was accepted.

Null Hypothesis 1.1.15 There is no significant difference between subject groups' perceptions about the level of technological research of the origin countries.

Alternate Hypothesis 1.1.15 There is a significant difference between subject groups' perceptions about the level of technological research of the origin countries.

The results indicated a significant difference between the consumer groups at the .050 level, with an F-value of 4.78688, significant at .003. The group means were 4.6750 in United Kingdom, 4.5250 in the United States and 4.4750 in Australia while Hong Kong was 4.0500. Therefore the null hypothesis was rejected and the alternate hypothesis was accepted.

Null Hypothesis 1.1.16 There is no significant difference between subject groups' perceptions about the level of labour costs of the origin countries.

Alternate Hypothesis 1.1.16 There is a significant difference between subject groups' perceptions about the level of labour costs of the origin countries.

The results indicated a significant difference between the consumer groups at the .050 level, with an F-value of 2.88908, significant at .036. The group mean was 3.9000 in United States while United Kingdom was 3.3875. Therefore the null hypothesis was rejected and the alternate hypothesis was accepted.

Null Hypothesis 1.1.17 There is no significant difference between subject groups' perceptions about the literacy rate of the origin countries.

Alternate Hypothesis 1.1.17 There is a significant difference between subject groups' perceptions about the literacy rate of the origin countries.

The results indicated a significant difference between the consumer groups at the .050 level, with an F-value of 5.44117, significant at .001. The group means were 4.6500 in United States and 4.5625 in United Kingdom while Hong Kong was 4.0000. Therefore the null hypothesis was rejected and the alternate hypothesis was accepted.

Null Hypothesis 1.1.18 . There is no significant difference between subject groups' perceptions about the welfare system of the origin countries.

Alternate Hypothesis 1.1.18 There is a significant difference between subject groups' perceptions about the welfare system of the origin countries.

The results indicated a significant difference between the consumer groups at the .050 level, with an F-value of 3.82831, significant at .010. The group means were 4.1625 in United States and 4.0875 in Hong Kong while Australia was 3.6125. Therefore the null hypothesis was rejected and the alternate hypothesis was accepted.

Null Hypothesis 1.1.19 There is no significant difference between subject groups' perceptions about the living standards of the origin countries.

Alternate Hypothesis 1.1.19 There is a significant difference between subject groups' perceptions about the living standards of the origin countries.

The results indicated a significant difference between the consumer groups at the .050 level, with an F-value of 1.97210, significant at .118. Therefore the null hypothesis was accepted and the alternate hypothesis was rejected.

5.3.1.2 Country Image Tests by COO

The results of MANOVA tests for country image by COO are shown in Table 5.4.

Table 5.4

Multivariate and Univariate Analyses of Country Image Variables Between Groups by COO

VARIABLE	F-VALUE	SIG of F	MEANS (N = 320)			
			Germany	Italy	Korea	Malaysia
I. Overall Multivariate Tests of Significance (S = 3, M = 7 1/2, N = 142)						
Pillais *V*	.88807	6.37395	.000			
Hotellings	1.56766	7.82915	.000			
Wilks' Λ	.31490	7.08846	.000			
Roy's GCR	.51506					
II. Univariate F-Tests with (3, 304) D.F.						
Knowledge about the Country (C1)	1.20889	.307	2.7000	2.8250	2.4500	2.6875
Knowledge about Politics (C2)	1.15371	.328	2.3250	2.0375	1.9875	2.1500
Knowledge about Economy (C3)	1.75094	.157	2.6000	2.3625	2.1375	2.5125
Knowledge of Tech. Advance. (C4)	4.02370	.008	2.9750	2.2000	2.5250	2.5750
Knowledge of Socio-Culture (C5)	2.05734	.106	2.7375	3.1125	2.5875	2.9500
Political Stability (C6)	3.28590	.021	3.7000	3.1500	3.1375	3.4750
Government Style (C7)	11.09316	.000	4.1000	4.6250	3.5000	3.5125
Political System (C8)	11.22394	.000	4.3250	4.4750	3.4625	3.4750
Economic Development (C9)	8.11790	.000	5.2875	4.7625	4.7250	4.3750
Industrialisation (C10)	17.76024	.000	5.4125	4.5125	4.7875	4.1375
Market System (C11)	7.59313	.000	4.3500	4.8000	3.9125	4.0250
Economic Environment (C12)	1.73789	.159	4.7250	4.4500	4.4125	4.3625
Product Quality (C13)	51.52707	.000	5.6125	5.6250	4.2375	4.0750
Production System (C14)	5.69267	.001	4.7625	4.1500	4.7625	4.7750
Technological Research (C15)	21.20599	.000	5.2125	4.2500	4.3875	3.8750
Labour Costs (C16)	49.89179	.000	4.4875	4.2250	3.1750	2.6250
Literacy Rate (C17)	23.52920	.000	5.0000	4.7000	4.1500	3.5250
Welfare System (C18)	15.25533	.000	4.5875	3.9625	3.7375	3.3250
Living Standard (C19)	25.63725	.000	5.0375	4.6625	4.1625	3.5875

Note: ▒▒ indicates that the null hypotheses were rejected at .050 level.

In a table of the F distribution, the critical F for 3 and 304 degrees of freedom and alpha level of .05 is 2.60. Thus, there are statistically significant differences at the .05 level between the groups for each variable considered separately. Those variables are C4, C6, C7, C8, C9, C10, C11, C13, C14, C15, C16, C17, C18, and C19. These results are presented with the hypotheses.

Null Hypothesis 1.2.1 There is no significant difference between the countries of origin with consumer groups' level of country familiarity.

Alternate Hypothesis 1.2.1 There is a significant difference between the countries of origin with consumer groups' level of country familiarity.

The results indicated no significant difference between the countries of origin at the .050 level, with an F-value of 1.20889, significant at .307. Therefore the null hypothesis was accepted and the alternate hypothesis was rejected.

Null Hypothesis 1.2.2 There is no significant difference between the countries of origin with consumer groups' level of familiarity about its politics.

Alternate Hypothesis 1.2.2 There is a significant difference between the countries of origin with consumer groups' level of familiarity about its politics.

The results indicated no significant difference between the countries of origin at the .050 level, with an F-value of 1.15371, significant at .328. Therefore the null hypothesis was accepted and the alternate hypothesis was rejected.

Null Hypothesis 1.2.3 There is no significant difference between the countries of origin with consumer groups' level of familiarity about its economy.

Alternate Hypothesis 1.2.3 There is a significant difference between the countries of origin with consumer groups' level of familiarity about its economy.

The results indicated no significant difference between the countries of origin at the .050 level, with an F-value of 1.75094, significant at .157. Therefore the null hypothesis was accepted and the alternate hypothesis was rejected.

Null Hypothesis 1.2.4 There is no significant difference between the countries of origin with consumer groups' level of familiarity about its technological advancement.

Alternate Hypothesis 1.2.4 There is a significant difference between the countries of origin with consumer groups' level of familiarity about its technological advancement.

The results indicated a significant difference between the countries of origin at the .050 level, with an F-value of 4.02370, significant at .008. The group mean of Germany was 2.9750 while Italy was 2.2000. Therefore the null hypothesis was rejected and the alternate hypothesis was accepted.

Null Hypothesis 1.2.5 There is no significant difference between countries of origin with consumer groups' level of familiarity about its socio-culture.

Alternate Hypothesis 1.2.5 There is a significant difference between countries of origin with consumer groups' level of familiarity about its socio-culture.

The results indicated no significant difference between the countries of origin at the .050 level, with an F-value of 2.05734, significant at .106. Therefore the null hypothesis was accepted and the alternate hypothesis was rejected.

Null Hypothesis 1.2.6 There is no significant difference between the countries of origin with consumer groups' perceptions about its stability of political environment..

Alternate Hypothesis 1.2.6 There is a significant difference between the countries of origin with consumer groups' perceptions about its stability of political environment..

The results indicated a significant difference between the countries of origin at the .050 level, with an F-value of 3.28590, significant at .021. The group mean of Germany was 3.7000 while Korea was 3.1375. Therefore the null hypothesis was rejected and the alternate hypothesis was accepted.

Null Hypothesis 1.2.7 There is no significant difference between the countries of origin with consumer groups' perceptions about its government style.

Alternate Hypothesis 1.2.7 There is a significant difference between the countries of origin with consumer groups' perceptions about its government style.

The results indicated a significant difference between the countries of origin at the .050 level, with an F-value of 11.09316, significant at .000. The group means were 4.6250 for Italy and 4.1000 for Germany while Korea was 3.5000. Therefore the null hypothesis was rejected and the alternate hypothesis was accepted.

Null Hypothesis 1.2.8 There is no significant difference between the countries of origin with consumer groups' perceptions about its political system.

Alternate Hypothesis 1.2.8 There is a significant difference between the countries of origin with consumer groups' perceptions about its political system.

The results indicated a significant difference between the countries of origin at the .050 level, with an F-value of 11.22394, significant at .000. The group means were 4.4750 for

Italy and 4.3250 for Germany while 3.4625 for Korea. Therefore the null hypothesis was rejected and the alternate hypothesis was accepted.

Null Hypothesis 1.2.9 There is no significant difference between the countries of origin with consumer groups' perceptions about its level of economic development.

Alternate Hypothesis 1.2.9 There is a significant difference between the countries of origin with consumer groups' perceptions about its level of economic development.

The results indicated a significant difference between the countries of origin at the .050 level, with an F-value of 8.11790, significant at .000. The group mean was 5.2875 for Germany while Malaysia was 4.3750. Therefore the null hypothesis was rejected and the alternate hypothesis was accepted.

Null Hypothesis 1.2.10 There is no significant difference between the countries of origin with consumer groups' perceptions about its level of industrialisation.

Alternate Hypothesis 1.2.10 There is a significant difference between the countries of origin with consumer groups' perceptions about its level of industrialisation.

The results indicated a significant difference between the countries of origin at the .050 level, with an F-value of 17.76024, significant at .000. The group means were 5.4125 for Germany and 4.7875 for Korea while Malaysia was 4.1375. Therefore the null hypothesis was rejected and the alternate hypothesis was accepted.

Null Hypothesis 1.2.11 There is no significant difference between the countries of origin with consumer groups' perceptions about its market system.

Alternate Hypothesis 1.2.11 There is a significant difference between the countries of origin with consumer groups' perceptions about its market system.

The results indicated a significant difference between the countries of origin at the .050 level, with an F-value of 7.59313, significant at .000. The group means were 4.8000 for Italy and 4.3500 for Germany while Korea was 3.9125. Therefore the null hypothesis was rejected and the alternate hypothesis was accepted.

Null Hypothesis 1.2.12 There is no significant difference between the countries of origin with consumer groups' perceptions about its stability of economic environment.

Alternate Hypothesis 1.2.12 There is a significant difference between the countries of origin with consumer groups' perceptions about its stability of economic environment.

The results indicated no significant difference between the countries of origin at the .050 level, with an F-value of 1.73789, significant at .159. Therefore the null hypothesis was accepted and the alternate hypothesis was rejected.

Null Hypothesis 1.2.13 There is no significant difference between the countries of origin with consumer groups' perceptions about its quality of products in general.

Alternate Hypothesis 1.2.13 There is a significant difference between the countries of origin with consumer groups' perceptions about its quality of products in general.

The results indicated a significant difference between the countries of origin at the .050 level, with an F-value of 51.52707, significant at .000. The group means were 5.6250 for

Italy and 5.6125 for Germany while Malaysia was 4.0750. Therefore the null hypothesis was rejected and the alternate hypothesis was accepted.

Null Hypothesis 1.2.14 There is no significant difference between the countries of origin with consumer groups' perceptions about its mass production system.

Alternate Hypothesis 1.2.14 There is a significant difference between the countries of origin with consumer groups' perceptions about its mass production system.

The results indicated a significant difference between the countries of origin at the .050 level, with an F-value of 5.69267, significant at .001. The group means were 4.7750 for Malaysia, 4.7625 for Korea and 4.7625 for Germany while Italy was 4.1500. Therefore the null hypothesis was rejected and the alternate hypothesis was accepted.

Null Hypothesis 1.2.15 There is no significant difference between the countries of origin with consumer groups' perceptions about its level of technological research.

Alternate Hypothesis 1.2.15 There is a significant difference between the countries of origin with consumer groups' perceptions about its level of technological research.

The results indicated a significant difference between the countries of origin at the .050 level, with an F-value of 21.20599, significant at .000. The group means were 5.2125 for Germany, 4.3875 for Korea and 4.2500 for Italy while Malaysia was 3 8750. Therefore the null hypothesis was rejected and the alternate hypothesis was accepted.

Null Hypothesis 1.2.16 There is no significant difference between the countries of origin with consumer groups' perceptions about its level of labour costs.

Alternate Hypothesis 1.2.16 There is a significant difference between the countries of origin with consumer groups' perceptions about its level of labour costs.

The results indicated a significant difference between the countries of origin at the .050 level, with an F-value of 49.89179, significant at .000. The group means were 4.4875 for Germany, 4.2250 for Italy and 3.1750 for Korea while Malaysia was 2.6250. Therefore the null hypothesis was rejected and the alternate hypothesis was accepted.

Null Hypothesis 1.2.17 There is no significant difference between the countries of origin with consumer groups' perceptions about its literacy rate.

Alternate Hypothesis 1.2.17 There is a significant difference between the countries of origin with consumer groups' perceptions about its literacy rate.

The results indicated a significant difference between the countries of origin at the .050 level, with an F-value of 23.52920, significant at .000. The group means were 5.000 for Germany, 4.7000 for Italy and 4.1500 for while Malaysia was 3.5250. Therefore the null hypothesis was rejected and the alternate hypothesis was accepted.

Null Hypothesis 1.2.18 There is no significant difference between the countries of origin with consumer groups' perceptions about its welfare system.

Alternate Hypothesis 1.2.18 There is a significant difference between the countries of origin with consumer groups' perceptions about its welfare system.

The results indicated a significant difference between the countries of origin at the .050 level, with an F-value of 15.25533, significant at .000. The group means were 4.5875 for Germany, 3.9625 for Italy and 3.7375 for while Malaysia was 3.3250. Therefore the null hypothesis was rejected and the alternate hypothesis was accepted.

Null Hypothesis 1.2.19 There is no significant difference between the countries of origin with consumer groups' perceptions about its living standard.

Alternate Hypothesis 1.2.19 There is a significant difference between the countries of origin with consumer groups' perceptions about its living standard.

The results indicated a significant difference between the countries of origin at the .050 level, with an F-value of 25.63725, significant at .000. The group means were 5.0375 for Germany, 4.6625 for Italy and 4.1625 for Korea while Malaysia was 3.5875. Therefore the null hypothesis was rejected and the alternate hypothesis was accepted.

5.3.2 Product Image Tests

Table 5.5 shows the results of multivariate tests on the product image variables between the groups by COT by COO.

Table 5.5

Multivariate and Univariate Analyses of Product Image Variables Between Groups by COT by COO

I. Overall Multivariate Tests of Significance (S = 9, M = 1 1/2, N = 145)

		F-VALUE	SIG of F
Pillais *V*	.43027	1.15864	.121
Hotellings	.47279	1.17277	.103
Wilks' Λ	.63718	1.16662	.112
Roy's GCR	.13860		

II. Univariate F-Tests with (9, 304) D.F.

Variable	P1	P2	P3	P4	P5	P6	P7
F-Value	1.14518	1.42203	1.57890	.94847	1.04589	1.69518	2.23826
Sig. of F	.328	.178	.121	.483	.427	.089	.020

Variable	P8	P9	P10	P11	P12	P13
F-Value	2.12918	1.63128	.94145	1.44634	1.36286	1.40256
Sig. of F	.027	.106	.489	.168	.204	.186

MANOVA tests on the product image by COT by COO indicated no significance at the significance level of .05, and the null hypothesis was accepted. Univariate analyses were conducted for further examination of significant differences in each of the variables of product image, because the primary focus of this study is to identify the differences between consumer groups' perceptions of the products.

5.3.2.1 Product Image Tests by COT

The results of MANOVA tests for product image by COT are shown in Table 5.6.

Table 5.6

Multivariate and Univariate Analyses of Product Image Variables Between Groups by COT

VARIABLE	F-VALUE	SIG of F	MEANS (N = 320)			
			UK	USA	HK	AU
I. Overall Multivariate Tests of Significance (S = 3, M = 4 1/2, N = 145)						
Pillais *V*	.32997	2.79491	.000			
Hotellings	.38505	2.86977	.000			
Wilks' Λ	.70054	2.83395	.000			
Roy's GCR	.18138					
II. Univariate F-Tests with (3, 304) D.F.						
Interest (P1)	.92210	.430	4.4250	4.4500	4.3500	4.7375
Overall Quality (P2)	2.65031	.049	5.3375	4.9125	5.1250	5.3000
Pride of Ownership (P3)	10.92800	.000	5.4375	5.1375	4.5875	5.5250
Social Class (P4)	7.07561	.000	5.3125	5.1500	4.7750	5.4875
Brand Recognition (P5)	1.61966	.185	3.6750	3.8125	3.8875	3.4125
Technical Advancement (P6)	4.05120	.008	5.7000	5.4750	5.2750	5.7750
Workmanship (P7)	5.16637	.002	5.5250	5.1500	4.9250	5.4000
Performance (P8)	4.27137	.006	5.4750	5.0750	4.9875	5.3375
Technological Design (P9)	3.15084	.025	5.5625	5.3750	5.1500	5.6125
Styling (P10)	8.13246	.000	5.4250	4.8500	4.8375	5.6000
Colour (P11)	9.16524	.000	5.1000	5.2000	4.4500	5.1625
Price (P12)	8.11797	.000	5.3375	5.0000	4.6375	5.4250
Buying Willingness (P13)	.46234	.709	3.5875	3.5750	3.3750	3.3750

Note: ▒▒ indicates that the null hypotheses were rejected at .050 level.

In a table of the F distribution, the critical F for 3 and 304 degrees of freedom and alpha level of .05 is 2.60. Thus, there are statistically significant differences at the .05 level between the groups for each variable considered separately. Those variables are P2, P3, P4, P6, P7, P8, P9, P10, P11, and P12. These results are presented with the hypotheses.

Null Hypothesis 2.1.1 There is no significant difference between subject groups' level of interests about the prototype car products.

Alternate Hypothesis 2.1.1 There is a significant difference between subject groups' level of interests about the prototype car products.

The results indicated no significant difference between the consumer groups at the .050 level, with an F-value of .92210, significant at .430. Therefore the null hypothesis was retained and the alternate hypothesis was rejected.

Null Hypothesis 2.1.2 There is no significant difference between subject groups' perceptions about the quality of prototype car products.

Alternate Hypothesis 2.1.2 There is a significant difference between subject groups' perceptions about the quality of prototype car products.

The results indicated a significant difference between the consumer groups at the .050 level, with an F-value of 2.65031, significant at .049. The group means were 5.3375 in United Kingdom and 5.3000 in Australia while United States was 4.9125. Therefore the null hypothesis was rejected and the alternate hypothesis was accepted.

Null Hypothesis 2.1.3 There is no significant difference between subject groups' level of feelings with pride of ownership of the prototype car products.

Alternate Hypothesis 2.1.3 There is a significant difference between subject groups' level of feelings as pride of ownership of the prototype car.

The results indicated a significant difference between the consumer groups at the .050 level, with an F-value of 10.92800, significant at .000. The group means were 5.5250 in Australia, 5.4375 in United Kingdom and 5.1375 on United States while Hong Kong was 4.5875. Therefore the null hypothesis was rejected and the alternate hypothesis was accepted.

Null Hypothesis 2.1.4 There is no significant difference between subject groups' feelings about the class of ownership of the prototype car.

Alternate Hypothesis 2.1.4 There is a significant difference between subject groups' feelings about the class of ownership of the prototype car.

The results indicated a significant difference between the consumer groups at the .050 level, with an F-value of 7.07561, significant at .000. The group means were 5.4875 in Australia, 5.3125 in United Kingdom and 5.1500 in United States while Hong Kong was 4.7750. Therefore the null hypothesis was rejected and the alternate hypothesis was accepted.

Null Hypothesis 2.1.5 There is no significant difference between subject groups' level of recognition about the brand of prototype car.

Alternate Hypothesis 2.1.5 There is a significant difference between subject groups' level of recognition about the brand of prototype car.

The results indicated no significant difference between the consumer groups at the .050 level, with an F-value of 1.61966, significant at .185. Therefore the null hypothesis was retained and the alternate hypothesis was rejected.

Null Hypothesis 2.1.6 There is no significant difference between subject groups' perceptions about the quality of prototype car products.

Alternate Hypothesis 2.1.6 There is a significant difference between subject groups' perceptions about the quality of prototype car.

The results indicated a significant difference between the consumer groups at the .050 level, with an F-value of 4.05120, significant at .008. The group means were 5.7750 in Australia and 5.7000 in United Kingdom while Hong Kong was 4.9125. Therefore the null hypothesis was rejected and the alternate hypothesis was accepted.

Null Hypothesis 2.1.7 There is no significant difference between subject groups' perceptions about the workmanship of prototype car products.

Alternate Hypothesis 2.1.7 There is a significant difference between subject groups' perceptions about the workmanship of prototype car.

The results indicated a significant difference between the consumer groups at the .050 level, with an F-value of 5.16637, significant at .002. The group means were 5.5250 in United Kingdom and 5.4000 in Australia while Hong Kong was 4.9250. Therefore the null hypothesis was rejected and the alternate hypothesis was accepted.

Null Hypothesis 2.1.8 There is no significant difference between subject groups' perceptions about the performance of prototype car.

Alternate Hypothesis 2.1.8 There is a significant difference between subject groups' perceptions about the performance of prototype car.

The results indicated a significant difference between the consumer groups at the .050 level, with an F-value of 4.27137, significant at .006. The group means were 5.4750 in United Kingdom and 5.3375 in Australia while Hong Kong was 4.9875. Therefore the null hypothesis was rejected and the alternate hypothesis was accepted.

Null Hypothesis 2.1.9 There is no significant difference between subject groups' perceptions about the level of technological design of prototype car products.

Alternate Hypothesis 2.1.9 There is a significant difference between subject groups' perceptions about the level of technological design of prototype car products.

The results indicated a significant difference between the consumer groups at the .050 level, with an F-value of 3.15084, significant at .025. The group means were 5.6125 in Australia and 5.5625 in United Kingdom while Hong Kong was 5.1500. Therefore the null hypothesis was rejected and the alternate hypothesis was accepted.

Null Hypothesis 2.1.10 There is no significant difference between subject groups' perceptions about the styling of prototype car products.

Alternate Hypothesis 2.1.10 There is a significant difference between subject groups' perceptions about the styling of prototype car products.

The results indicated a significant difference between the consumer groups at the .050 level, with an F-value of 8.13246, significant at .000. The group means were 5.6000 in Australia and 5.4250 in United Kingdom while Hong Kong was 4.8375. Therefore the null hypothesis was rejected and the alternate hypothesis was accepted.

Null Hypothesis 2.1.11 There is no significant difference between subject groups' perceptions about the colour availability of prototype car products.

Alternate Hypothesis 2.1.11 There is a significant difference between subject groups' perceptions about the colour availability of prototype car products.

The results indicated a significant difference between the consumer groups at the .050 level, with an F-value of 9.16524, significant at .000. The group means were 5.2000 in

United States, 5.1625 in Australia and 5.1000 in United Kingdom while Hong Kong was 4.4500. Therefore the null hypothesis was rejected and the alternate hypothesis was accepted.

Null Hypothesis 2.1.12 There is no significant difference between subject groups' perceptions about the price of prototype car products.
Alternate Hypothesis 2.1.12 There is a significant difference between subject groups' perceptions about the price of prototype car products.

The results indicated a significant difference between the consumer groups at the .050 level, with an F-value of 8.11797, significant at .000. The group means were 5.4250 in Australia and 5.3375 in United Kingdom while Hong Kong was 4.6375. Therefore the null hypothesis was rejected and the alternate hypothesis was accepted.

5.3.2.2 Product Image Tests by COO

The results of MANOVA tests for country image by COO are shown in Table 5.7. In a table of the F distribution, the critical F for 3 and 304 degrees of freedom and alpha level of .05 is 2.60. Thus, there are statistically significant differences at the .05 level between the groups for each variable considered separately. Those variables are P2, P3, P4, P5, C6, P6, P7, P8, P9, P11, and P12. These results are presented with the hypotheses.

Null Hypothesis 2.2.1 There is no significant difference between countries of origin with consumer groups' level of interests on the prototype car products.
Alternate Hypothesis 2.2.1 There is a significant difference between countries of origin with consumer groups' level of interests on the prototype car products.

The results indicated no significant difference between the countries of origin at the .050 level, with an F-value of .14419, significant at .933. Therefore the null hypothesis was retained and the alternate hypothesis was rejected.

Table 5.7

Multivariate and Univariate Analyses of Product Image Variables

Between Groups by COO

VARIABLE		F-VALUE	SIG of F	MEANS (N = 320)			
				Germany	Italy	Korea	Malaysia
I. Overall Multivariate Tests of Significance (S = 3, M = 4 1/2, N = 145)							
Pillais *V*	.32251	2.72412	.000				
Hotellings	.37928	2.82677	.000				
Wilks' Λ	.70536	2.77609	.000				
Roy's GCR	.19615						
II. Univariate F-Tests with (3, 304) D.F.							
Interest (P1)		.14419	.933	4.5750	4.4125	4.4750	4.5000
Overall Quality (P2)		9.57403	.000	5.5375	5.3875	5.0375	4.7125
Pride of Ownership (P3)		6.30000	.000	5.5125	5.3750	4.8500	4.9500
Social Class (P4)		9.26255	.000	5.4000	5.5375	4.7875	5.0000
Brand Recognition (P5)		3.31125	.020	3.9000	3.7375	3.8875	3.2625
Technical Advancement (P6)		4.12508	.007	5.8500	5.6125	5.4375	5.3250
Workmanship (P7)		6.42775	.000	5.6125	5.2500	5.1125	4.9250
Performance (P8)		4.80908	.003	5.4125	5.4375	5.0500	4.9750
Technological Design (P9)		4.49907	.004	5.6250	5.6500	5.2750	5.1500
Styling (P10)		.40309	.751	5.1875	5.2875	5.1625	5.0750
Colour (P11)		5.15385	.002	5.0250	5.2500	5.0250	4.6125
Price (P12)		13.40287	.000	5.3750	5.6000	4.7875	4.6575
Buying Willingness (P13)		.56405	.639	3.4750	3.6125	3.5250	3.3000

Note: indicates that **the null hypotheses were rejected** at .050 level.

Null Hypothesis 2.2.2 There is no significant difference between countries of origin with consumer groups' perceptions on the quality of prototype car products.

Alternate Hypothesis 2.2.2 There is a significant difference between countries of origin with consumer groups' perceptions on the quality of prototype car products.

The results indicated a significant difference between the countries of origin at the .050 level, with an F-value of 9.57403, significant at .000. The group means were 5.5375 for Germany and 5.3875 for Italy while Malaysia was 4.7125. Therefore the null hypothesis was rejected and the alternate hypothesis was accepted.

Null Hypothesis 2.2.3 There is no significant difference between countries of origin with consumer groups' level of feelings about the pride of ownership of the prototype car products.

Alternate Hypothesis 2.2.3 There is a significant difference between countries of origin with consumer groups' level of feelings about the pride of ownership of the prototype car products.

The results indicated a significant difference between the countries of origin at the .050 level, with an F-value of 6.30000, significant at .000. The group means were 5.5125 for Germany and 5.3750 for Italy while Korea was 4.8500. Therefore the null hypothesis was rejected and the alternate hypothesis was accepted.

Null Hypothesis 2.2.4 There is no significant difference between countries of origin with consumer groups' feelings about the class of ownership of the prototype car products.

Alternate Hypothesis 2.2.4 There is a significant difference between countries of origin with consumer groups' feelings about the class of ownership of the prototype car products.

The results indicated a significant difference between the countries of origin at the .050 level, with an F-value of 9.26255, significant at .000. The group means were 5.5375 for Italy and 5.4000 for Germany while Korea was 4.7875. Therefore the null hypothesis was rejected and the alternate hypothesis was accepted.

Null Hypothesis 2.2.5 There is no significant difference between countries of origin with consumer groups' level of brand recognition of the prototype car products.

Alternate Hypothesis 2.2.5 There is a significant difference between countries of origin with consumer groups' level of brand recognition of the prototype car products.

The results indicated a significant difference between the countries of origin at the .050 level, with an F-value of 3.31125, significant at .020. The group means were 3.9000 for Germany and 3.8875 for Korea and 3.7375 for Italy while Malaysia was 3.2625. Therefore the null hypothesis was rejected and the alternate hypothesis was accepted.

Null Hypothesis 2.2.6 There is no significant difference between countries of origin with consumer groups' perceptions about the level of technical advancement of the prototype car products.

Alternate Hypothesis 2.2.6 There is a significant difference between countries of origin with consumer groups' perceptions about the level of technical advancement of the prototype car products.

The results indicated a significant difference between the countries of origin at the .050 level, with an F-value of 4.12508, significant at .007. The group mean was 5.8500 for Germany while Malaysia was 5.3250. Therefore the null hypothesis was rejected and the alternate hypothesis was accepted.

Null Hypothesis 2.2.7 There is no significant difference between countries of origin with consumer groups' perceptions about the level of workmanship of the prototype car products.

Alternate Hypothesis 2.2.7 There is a significant difference between countries of origin with consumer groups' perceptions about the level of workmanship of the prototype car products.

The results indicated a significant difference between the countries of origin at the .050 level, with an F-value of 6.42775, significant at .000. The group means were 5.6125 for Germany and 5.3500 for Italy while Malaysia was 4.9250. Therefore the null hypothesis was rejected and the alternate hypothesis was accepted.

Null Hypothesis 2.2.8 There is no significant difference between countries of origin with consumer groups' perceptions about the level of performance of the prototype car products.

Alternate Hypothesis 2.2.8 There is a significant difference between countries of origin with consumer groups' perceptions about the level of performance of the prototype car products.

The results indicated a significant difference between the countries of origin at the .050 level, with an F-value of 4.80908, significant at .003. The group means were 5.4375 for Italy and 5.4125 for Germany while Malaysia was 4.9750. Therefore the null hypothesis was rejected and the alternate hypothesis was accepted.

Null Hypothesis 2.2.9 There is no significant difference between countries of origin with consumer groups' perceptions about the technological design of the prototype car products.

Alternate Hypothesis 2.2.9 There is a significant difference between countries of origin with consumer groups' perceptions about the technological design of the prototype car products.

The results indicated a significant difference between the countries of origin at the .050 level, with an F-value of 4.49907, significant at .004. The group means were 5 6500 for Italy and 5.6250 for Germany while Malaysia was 5.1500. Therefore the null hypothesis was rejected and the alternate hypothesis was accepted.

Null Hypothesis 2.2.10 There is no significant difference between countries of origin with consumer groups' perceptions about the styling of the prototype car products.

Alternate Hypothesis 2 2.10 There is a significant difference between countries of origin with consumer groups' perceptions about the styling of the prototype car products.

The results indicated no significant difference between the countries of origin at the 050 level, with an F-value of .40309, significant at .751. Therefore the null hypothesis was accepted and the alternate hypothesis was rejected.

Null Hypothesis 2 2 11 There is no significant difference between countries of origin with consumer groups' perceptions about the colour availability of the prototype car products

Alternate Hypothesis 2 2 11 There is a significant difference between countries of origin with consumer groups' perceptions about the colour availability of the prototype car products

The results indicated a significant difference between the countries of origin at the 050 level, with an F-value of 5.15385, significant at 002 The group means were 5 2500 for

Italy, and 5.0250 for Korea and Germany while Malaysia was 4.6125. Therefore the null hypothesis was rejected and the alternate hypothesis was accepted.

Null Hypothesis 2.2.12 There is no significant difference between countries of origin with consumer groups' perceptions about the price of the prototype car products. Alternate Hypothesis 2.2.12 There is a significant difference between countries of origin with consumer groups' perceptions about the price of the prototype car products.

The results indicated a significant difference between the countries of origin at the .050 level, with an F-value of 13.40287, significant at .000. The group means were 5.6000 for Italy and 5.3750 for Germany while Malaysia was 4.6375. Therefore the null hypothesis was rejected and the alternate hypothesis was accepted.

5.3.3 Purchase Willingness Test by COT[1]

Null Hypothesis 3.1.1 There is no significant difference between subject groups' level of purchase willingness on the prototype car products. Alternate Hypothesis 3.1.1 There is a significant difference between subject groups' level of purchase willingness on the prototype car products.

The results indicated no significant difference between the consumer groups at the .050 level, with an F-value of .46234, significant at .709. Therefore the null hypothesis was accepted and the alternate hypothesis was rejected.

[1] Statistics are shown in Table 5.5 and Table 5.6.

5.3.4 Purchase Willingness Test by COO[2]

Null Hypothesis 3.2.1 There is no significant difference between countries of origin with consumer groups' purchase willingness of the prototype car products.
Alternate Hypothesis 3.2.1 There is a significant difference between countries of origin with consumer groups' purchase willingness of the prototype car products.

The results indicated no significant difference between the countries of origin at the .050 level, with an F-value of .56405, significant at .639. Therefore the null hypothesis was accepted and the alternate hypothesis was rejected.

5.4 Post-Hoc Tests

Multivariate analyses of covariance (MANCOVA) were used to test if knowledge of cars, car usage, information seeking about cars and ownership of cars *were a covariant* of beliefs concerning country and its products. The items were the same as those in product-country image questionnaire with the exception of the car ownership question, which is presented in the questionnaire in Appendix D.

There were no significant covariates resulting from the multivariate test of country image. Further univariate F-tests defined significant country image variables. Those variables were knowledge of the country (C1), knowledge of politics (C2), knowledge of economy (C3), knowledge of technological advancement (C4), and political system (C8) of countries. Regression analysis also shows similar results of significant variables which are knowledge of the country (C1), knowledge of politics (C2), knowledge of economy (C3), knowledge of technological advancement (C4), political system (C8), and product quality in general (C13) for the countries. The result shows that the consumers' knowledge level of car products correlates to the consumers' knowledge about the

[2] Statistics are shown in Table 5.5 and Table 5.7.

country (i.e., G1 vs. C1, C2, C3, C4, C13; G2 vs. C1, C8; G4 vs. C2). The statistics are summarised in Appendix G.

The same procedures applied to the test of product image. The results of multivariate tests for product image were significant. F-value were 2.32948 for Pillais, 2.40614 for Hotellings T^2 and 2.36969 for Wilks Λ at the level of .000. Univariate F-tests defined that most of the country image variables are significant with the exceptions of social class of owners (P4), workmanship (P7), styling (P10), and price (P12) of the new car products. The result shows that the consumers' knowledge level of car products correlates to the consumers' beliefs on the car products (i.e., G1 vs. P1, P2, P3, P5, P6, P8, P9, P10, P11, P13; G2 vs. P11). The statistics of regression analysis are summarised in Appendix H.

5.5 Summary

This chapter has presented the research findings of the respondents' beliefs about a country and its products, and their purchase intentions toward *automobiles as prototype* products. The differences between the subject groups' beliefs about a country, its products and their willingness to purchase were tested using multivariate analysis of variance and univariate F-tests.

Characteristics of respondents were briefly summarised. Then, overall multivariate tests of significance were conducted on product-country images, by COT and by COO. The results generally tend to be significant, and so univariate F-tests were conducted for the variables of country image and product image, framed as null hypotheses. The hypotheses were tested for the individual variables of the three constructs, by COT and COO separately. In addition, post-hoc tests for general questions were made and the results were illustrated.

The results of the hypotheses test for country image are summarised here as below, and are shown in Table 5.8.

- There is no significant difference between consumer groups' beliefs of COO countries' government style (C7), political system (C8), market system (C11), and the level of living standards (C19).
- There is no significant difference between countries of origin with consumer groups' knowledge about the country (C1), politics (C2), economy (C3), socio-culture (C5), and their perceptions of economic environment (C12).

Table 5. 8

The Results of the Hypotheses Tests on Country Image by COT and COO

Hypothesis No	Country Image Factors	Decision on Null Hypotheses	
		by COT	by COO
1.1	Knowledge about the Country (C1)	Reject	Accept
1.2	Knowledge about Politics (C2)	Reject	Accept
1.3	Knowledge about Economy (C3)	Reject	Accept
1.4	Knowledge of Tech. Advance. (C4)	Reject	Reject
1.5	Knowledge of Socio-Culture (C5)	Reject	Accept
1.6	Political Stability (C6)	Reject	Reject
1.7	Government Style (C7)	Accept	Reject
1.8	Political System (C8)	Accept	Reject
1.9	Economic Development (C9)	Reject	Reject
1.10	Industrialisation (C10)	Reject	Reject
1.11	Market System (C11)	Accept	Reject
1.12	Economic Environment (C12)	Reject	Accept
1.13	Product Quality (C13)	Reject	Reject
1.14	Production System (C14)	Reject	Reject
1.15	Technological Research (C15)	Reject	Reject
1.16	Labour Costs (C16)	Reject	Reject
1.17	Literacy Rate (C17)	Reject	Reject
1.18	Welfare System (C18)	Reject	Reject
1.19	Living Standard (C19)	Accept	Reject

- However, there is a significant difference between groups by COT and by COO with country image variables of knowledge about technological advancement (C4),

political stability (C6), economic development (C9), industrialisation (C10), product quality (C13), mass production system (C14), technological research (C15), labour costs (C16), literacy rate (C17), and welfare system (C18).

Table 5.8 shows clearly that the hypotheses of country familiarity factors (C1, C2, C3, C5) are accepted by country of origin (COO) and are rejected by country of target (COT) with exception of technological advancement factor (C4). It indicates that consumers' perceptions of the country act differently in the consumer markets of COT. While the country image factors of government style (C7), political system (C8), market system (C11) and living standard (C19) are accepted by COT, and economic environment (C12) is accepted by COO, most country image factors are rejected by COT and COO. It also imply that those country image factors (C4, C6, C9, C10, C13, C14, C15, C16, C17, C18) act as cues of consumers' perceptions about the country by COT and by COO.

The results of the hypotheses test for product image and consumer willingness to purchase are summarised here as below, and are shown in Table 5.9.

- There is no significant difference between consumer groups' brand recognition (P5), interests (P1) and their willingness to purchase (P13) of the prototype car products.
- There is no significant difference between countries of origin with consumer groups' interest (P1), styling (P10) and their willingness to purchase (P13) of the prototype car products.
- Nevertheless, there is a significant difference between groups by COT and by COO with product image variables of overall quality (P2), pride of ownership (P3), owners' social class (P4), technical advancement (P6), workmanship (P7), performance (P8), technological design (P9), colour (P11) and price (P12) of the prototype car products.

Table 5.9 also shows clearly that most of product image factors act as cues by COT and COO in consumers' product evaluations. The hypothesis of product interest (P1) and purchase willingness (P13) were accepted by COT and COO, because the prototype car product is an hypothetical product. It indicates that consumers are not familiar with the new products. While the product image factors of brand recognition (P5) by COT and

styling (P10) by COO are accepted, most product image factors are rejected by COT and COO. Those product image factors are overall quality (P2), pride of ownership (P3), owners' social class (P4), technical advancement (P6), workmanship (P7), performance (P8), technological design (P9), colour (P11) and price (P12).

Table 5. 9

The Results of the Hypotheses Tests on Product Image by COT and COO

Hypothesis No	Product Image Factors	Decision on Null Hypotheses	
		by COT	by COO
2.1	Interest (P1)	Accept	Accept
2.2	Overall Quality (P2)	Reject	Reject
2.3	Pride of Ownership (P3)	Reject	Reject
2.4	Social Class (P4)	Reject	Reject
2.5	Brand Recognition (P5)	Accept	Reject
2.6	Technical Advancement (P6)	Reject	Reject
2.7	Workmanship (P7)	Reject	Reject
2.8	Performance (P8)	Reject	Reject
2.9	Technological Design (P9)	Reject	Reject
2.10	Styling (P10)	Reject	Accept
2.11	Colour (P11)	Reject	Reject
2.12	Price (P12)	Reject	Reject
2.13	Buying Willingness (P13)	Accept	Accept

As a follow-up procedure, in the next chapter, the hypotheses on product-country images and purchase willingness are tested again by each individual group of COT using one-way analysis of variance (ANOVA) to compare the statistical significance between the groups. In the next chapter, ANOVA results, as further data analyses, will be presented in the perspective of country of target (COT) in an in-depth analysis.

Chapter 6
Further Data Analysis and Results

6. 1 Introduction

In the previous chapter country image and product image were examined by country of target (COT) as subjects' groups, and by country of origin (COO) as product origin groups. Consumers' purchase willingness was also tested by COT and by COO. As a follow-up procedure, in this chapter, the hypotheses on product-country images are tested by each COT using one-way analysis of variance (ANOVA) to compare the statistical significance between the groups. This is to examine the role of country image in consumers' product evaluations in their attitude toward the prototype automobiles. Finally, this chapter presents the findings of the research on consumers' beliefs about the country, its products and their willingness to purchase the car products.

6.2 Country Image Tests

Using one-way ANOVA, in this section, the country image of origin countries is tested by each country of target.[i] The results are summarised at the end of each country of target in tabular form, namely Table 6.1 for the United Kingdom, Table 6.2 for the United States, Table 6.3 for Hong Kong, and Table 6.4 for Australia.

6.2.1 Country of Target: United Kingdom

Null Hypothesis 4.1.1 There is no significant difference between UK subject groups' level of general knowledge about the origin countries.

Alternate Hypothesis 4.1.1 There is a significant difference between UK subject groups' level of general knowledge about the origin countries.

The results indicated no significant difference between the groups at the .050 level, with an F-ratio of 2.2666, at $p < .0875$. Therefore the null hypothesis was accepted and the alternate hypothesis was rejected.

Null Hypothesis 4.1.2 There is no significant difference between UK subject groups' level of general knowledge about the politics of the origin countries.

Alternate Hypothesis 4.1.2 There is a significant difference between UK subject groups' level of general knowledge about the politics of the origin countries.

The results indicated no significant difference between the groups at the .050 level, with an F-ratio of 2.4096, at $p < .0735$. Therefore the null hypothesis was accepted and the alternate hypothesis was rejected.

Null Hypothesis 4.1.3 There is no significant difference between UK subject groups' level of general knowledge about the economy of the origin countries.

Alternate Hypothesis 4.1.3 There is a significant difference between UK subject groups' level of general knowledge about the economy of the origin countries.

The results indicated no significant difference between the groups at the .050 level, with an F-ratio of 1.3629, at $p < .2606$. Therefore the null hypothesis was accepted and the alternate hypothesis was rejected.

Null Hypothesis 4.1.4 There is no significant difference between UK subject groups' level of general knowledge about the technological advancement of the origin countries.

Alternate Hypothesis 4.1.4 There is a significant difference between UK subject groups' level of general knowledge about the technological advancement of the origin countries.

The results indicated no significant difference between the groups at the .050 level, with an F-ratio of 1.0149, at $p < .3909$. Therefore the null hypothesis was accepted and the alternate hypothesis was rejected.

Null Hypothesis 4.1.5 There is no significant difference between UK subject groups' level of general knowledge about the socio-culture of the origin countries.

Alternate Hypothesis 4.1.5 There is a significant difference between UK subject groups' level of general knowledge about the socio-culture of the origin countries.

The results indicated a significant difference between the groups at the .050 level, with an F-ratio of 3.94026, at $p < .0114$. The group mean was 3.6500 for Italy while Korea was 2.1500. Therefore the null hypothesis was rejected and the alternate hypothesis was accepted.

Null Hypothesis 4.1.6 There is no significant difference between UK subject groups' perceptions about the stability of political environment of the origin countries

Alternate Hypothesis 4.1.6 There is a significant difference between UK subject groups' perceptions about the stability of political environment of the origin countries.

The results indicated a significant difference between the groups at the .050 level, with an F-ratio of 6.4242, at $p < .0006$. The group mean was 4.3500 for Germany while Italy

was 2.4500. Therefore the null hypothesis was rejected and the alternate hypothesis was accepted.

Null Hypothesis 4.1.7 There is no significant difference between UK subject groups' perceptions about the government style of the origin countries.

Alternate Hypothesis 4.1.7 There is a significant difference between UK subject groups' perceptions about the government style of the origin countries.

The results indicated a significant difference between the groups at the .050 level, with an F-ratio of 7.7075, at $p < .0001$. The group means were 5.0000 for Italy and 4.6000 for Germany while Malaysia was 3.3000. Therefore the null hypothesis was rejected and the alternate hypothesis was accepted.

Null Hypothesis 4.1.8 There is no significant difference between UK subject groups' perceptions about the political system of the origin countries.

Alternate Hypothesis 4.1.8 There is a significant difference between UK subject groups' perceptions about the political system of the origin countries.

The results indicated a significant difference between the groups at the .050 level, with an F-ratio of 10.6068, at $p < .0000$. The group means were 5.2000 for Germany and 4.8500 for Italy while Korea was 3.2000. Therefore the null hypothesis was rejected and the alternate hypothesis was accepted.

Null Hypothesis 4.1.9 There is no significant difference between UK subject groups' perceptions about the level of economic development of the origin countries.

Alternate Hypothesis 4.1.9 There is a significant difference between UK subject groups' perceptions about the level of economic development of the origin countries.

The results indicated a significant difference between the groups at the .050 level, with an F-ratio of 11.0152, at $p < .0000$. The means were 6.1500 for Germany and 5.1000 for Italy while Korea was 4.2500. Therefore the null hypothesis was rejected and the alternate hypothesis was accepted.

Null Hypothesis 4.1.10 There is no significant difference between UK subject groups' perceptions about the level of industrialisation of the origin countries.

Alternate Hypothesis 4.1.10 There is a significant difference between UK subject groups' perceptions about the level of industrialisation of the origin countries.

The results indicated a significant difference between the groups at the .050 level, with an F-ratio of 13.4253, at $p < .0000$. The group means were 6.2000 for Germany and 5.2000 for Italy while Malaysia was 4.0000. Therefore the null hypothesis was rejected and the alternate hypothesis was accepted.

Null Hypothesis 4.1.11 There is no significant difference between UK subject groups' perceptions about the market system of the origin countries.

Alternate Hypothesis 4.1.11 There is a significant difference between UK subject groups' perceptions about the market system of the origin countries.

The results indicated a significant difference between the groups at the .050 level, with an F-ratio of 4.5183, at $p < .0057$. The group mean was 5.0000 for Italy while Malaysia was 3.6500. Therefore the null hypothesis was rejected and the alternate hypothesis was accepted.

Null Hypothesis 4.1.12 There is no significant difference between UK subject groups' perceptions about the stability of economic environment of the origin countries.

Alternate Hypothesis 4.1.12 There is a significant difference between UK subject groups' perceptions about the stability of economic environment of the origin countries.

The results indicated a significant difference between the groups at the .050 level, with an F-ratio of 5.3169, at $p < .0022$. The group mean was 5.3000 for Germany while Malaysia was 3.9500. Therefore the null hypothesis was rejected and the alternate hypothesis was accepted.

Null Hypothesis 4.1.13 There is no significant difference between UK subject groups' perceptions about the general quality of products of the origin countries.

Alternate Hypothesis 4.1.13 There is a significant difference between UK subject groups' perceptions about the general quality of products of the origin countries.

The results indicated a significant difference between the groups at the .050 level, with an F-ratio of 16.4800, at $p < .0000$. The group means were 5.9000 for Germany and 5.2000 for Italy while Malaysia was 3.7500. Therefore the null hypothesis was rejected and the alternate hypothesis was accepted.

Null Hypothesis 4.1.14 There is no significant difference between UK subject groups' perceptions about the mass production system of the origin countries.

Alternate Hypothesis 4.1.14 There is a significant difference between UK subject groups' perceptions about the mass production system of the origin countries.

The results indicated no significant difference between the groups at the .050 level, with an F-ratio of .4180, at $p < .7406$. Therefore the null hypothesis was accepted and the alternate hypothesis was rejected.

Null Hypothesis 4.1.15 There is no significant difference between UK subject groups' perceptions about the level of technological research of the origin countries.

Alternate Hypothesis 4.1.15 There is a significant difference between UK subject groups' perceptions about the level of technological research of the origin countries.

The results indicated a significant difference between the groups at the .050 level, with an F-ratio of 16 5095, at $p < .0000$. The group means were 6.0500 for Germany and 4.5000 for Italy while Malaysia was 3.8000. Therefore the null hypothesis was rejected and the alternate hypothesis was accepted.

Null Hypothesis 4.1.16 There is no significant difference between UK subject groups' perceptions about the level of labour costs of the origin countries.

Alternate Hypothesis 4.1.16 There is a significant difference between UK subject groups' perceptions about the level of labour costs of the origin countries.

The results indicated a significant difference between the groups at the .050 level, with an F-ratio of 29.9685, at $p < .0000$. The group means were 4.7500 for Germany and

3.9500 for Italy while Malaysia was 2.3500. Therefore the null hypothesis was rejected and the alternate hypothesis was accepted.

Null Hypothesis 4.1.17 There is no significant difference between UK subject groups' perceptions about the literacy rate of the origin countries.

Alternate Hypothesis 4.1.17 There is a significant difference between UK subject groups' perceptions about the literacy rate of the origin countries.

The results indicated a significant difference between the groups at the .050 level, with an F-ratio of 33.4122, at $p < .0000$. The group means were 5.9600 for Germany, 5.6500 for Italy and 3.7500 for Korea while Malaysia was 2.9000. Therefore the null hypothesis was rejected and the alternate hypothesis was accepted.

Null Hypothesis 4.1.18 There is no significant difference between UK subject groups' perceptions about the welfare system of the origin countries.

Alternate Hypothesis 4.1.18 There is a significant difference between UK subject groups' perceptions about the welfare system of the origin countries.

The results indicated a significant difference between the groups at the .050 level, with an F-ratio of 17.5721, at $p < .0000$. The group means were 4.9500 for Germany and 4.2000 for Italy while Malaysia was 2.6000. Therefore the null hypothesis was rejected and the alternate hypothesis was accepted.

Null Hypothesis 4.1.19 There is no significant difference between UK subject groups' perceptions about the living standards of the origin countries.

Alternate Hypothesis 4.1.19 There is a significant difference between UK subject groups' perceptions about the living standards of the origin countries.

The results indicated a significant difference between the groups at the .050 level, with an F-ratio of 36.1616, at $p < .0000$. The group means were 5.7000 for Germany, 4.5500 for Italy and 3.5000 for Korea while Malaysia was 2.8000. Therefore the null hypothesis was rejected and the alternate hypothesis was accepted.

Table 6.1

The Test Results of Hypotheses on Country Image and Significance Comparison Between Groups of Country of Origin; Country of Target: United Kingdom

Hypo-thesis No.	Hypo-thesis Tests	Country Image Factors		Comparison by Mean	
4.1.1	Accept	Knowledge of the Country (C1)	Very little	M < K < G < I	Very much
4.1.2	Accept	Knowledge about Politics (C2)	Very little	M < K < G < I	Very much
4.1.3	Accept	Knowledge about Economy (C3)	Very little	M < K < G < I	Very much
4.1.4	Accept	Knowledge of Tech. Adv. (C4)	Very little	M < I < K < G	Very much
4.1.5	Reject	Knowledge of Socio-Culture (C5)	Very little	K < M < G < I	Very much
4.1.6	Reject	Political Stability (C6)	Unstable	I < M < K < G	Stable
4.1.7	Reject	Government Style (C7)	Military	M < K < G < I	Civilian
4.1.8	Reject	Political System (C8)	Autocratic	K < M < I < G	Democratic
4.1.9	Reject	Economic Development (C9)	Underdeveloped	K < M < I < G	Developed
4.1.10	Reject	Industrialisation (C10)	Not very	M < K < I < G	Very
4.1.11	Reject	Market System (C11)	Centrally planned	M < K < G < I	Free market
4.1.12	Reject	Economic Environment (C12)	Unstable	M < I < K < G	Stable
4.1.13	Reject	Product Quality (C13)	Very low	M < K < I < G	Very high
4.1.14	Accept	Production System (C14)	Very little	I < M < G < K	Very much
4.1.15	Reject	Technological Research (C15)	Very low	M < K < I < G	Very high
4.1.16	Reject	Labour Costs (C16)	Very low	M < K < I < G	Very high
4.1.17	Reject	Literacy Rate (C17)	Very low	M < K < I < G	Very high
4.1.18	Reject	Welfare System (C18)	Very little	M < K < I < G	A great deal
4.1.19	Reject	Living Standard (C19)	Very low	M < K < I < G	Very high

Note ; G for Germany, I for Italy, K for Korea, and M for Malaysia

6.2.2 Country of Target: United States

Null Hypothesis 4.2.1 There is no significant difference between United States subject groups' level of general knowledge about the origin countries.

Alternate Hypothesis 4.2.1 There is a significant difference between United States subject groups' level of general knowledge about the origin countries.

The results indicated a significant difference between the groups at the .050 level, with an F-ratio of 3.6930, at $p < .0154$. The group mean was 4.2000 for Malaysia while Korea was 2.6500. Therefore the null hypothesis was rejected and the alternate hypothesis was accepted.

Null Hypothesis 4.2.2 There is no significant difference between United States subject groups' level of general knowledge about the politics of the origin countries.

Alternate Hypothesis 4.2.2 There is a significant difference between United States subject groups' level of general knowledge about the politics of the origin countries.

The results indicated a significant difference between the groups at the .050 level, with an F-ratio of 3.4323, at $p < .0211$. The group means were 3.1000 for Malaysia and 2.9500 for Germany while Italy was 2.0000. Therefore the null hypothesis was rejected and the alternate hypothesis was accepted.

Null Hypothesis 4.2.3 There is no significant difference between United States subject groups' level of general knowledge about the economy of the origin countries.

Alternate Hypothesis 4.2.3 There is a significant difference between United States subject groups' level of general knowledge about the economy of the origin countries.

The results indicated a significant difference between the groups at the .050 level, with an F-ratio of 6.2116, at $p < .0008$. The group means were 3.9000 for Malaysia and 3.2500 Germany while Korea was 2.0000. Therefore the null hypothesis was rejected and the alternate hypothesis was accepted.

Null Hypothesis 4.2.4 There is no significant difference between United States subject groups' level of general knowledge about the technological advancement of the origin countries.

Alternate Hypothesis 4.2.4 There is a significant difference between United States subject groups' level of general knowledge about the technological advancement of the origin countries.

The results indicated a significant difference between the groups at the .050 level, with an F-ratio of 3.6631, at $p < .0160$. The group means were 3.6000 for Malaysia and 3.3500 for Germany while Italy was 2.0500. Therefore the null hypothesis was rejected and the alternate hypothesis was accepted.

Null Hypothesis 4.2.5 There is no significant difference between United States subject groups' level of general knowledge about the socio-culture of the origin countries.

Alternate Hypothesis 4.2.5 There is a significant difference between United States subject groups' level of general knowledge about the socio-culture of the origin countries.

The results indicated no significant difference between the groups at the .050 level, with an F-ratio of 2.4149, at $p < .0730$. Therefore the null hypothesis was accepted and the alternate hypothesis was rejected.

Null Hypothesis 4.2.6 There is no significant difference between United States subject groups' perceptions about the stability of political environment of the origin countries.

Alternate Hypothesis 4.2.6 There is a significant difference between United States subject groups' perceptions about the stability of political environment of the origin countries.

The results indicated no significant difference between the groups at the .050 level, with an F-ratio of .5137, at $p < .6740$. Therefore the null hypothesis was accepted and the alternate hypothesis was rejected.

Null Hypothesis 4.2.7 There is no significant difference between United States subject groups' perceptions about the government style of the origin countries.

Alternate Hypothesis 4.2.7 There is a significant difference between United States subject groups' perceptions about the government style of the origin countries.

The results indicated a significant difference between the groups at the .050 level, with an F-ratio of 3.6123, at $p < .0170$. The group means were 4.6500 for Italy and 4.6500 for Germany while Korea was 3.1500. Therefore the null hypothesis was rejected and the alternate hypothesis was accepted.

Null Hypothesis 4.2.8 There is no significant difference between United States subject groups' perceptions about the political system of the origin countries.

Alternate Hypothesis 4.2.8 There is a significant difference between United States subject groups' perceptions about the political system of the origin countries.

The results indicated no significant difference between the groups at the .050 level, with an F-ratio of 1.17714, at $p < .1598$. Therefore the null hypothesis was accepted and the alternate hypothesis was rejected.

Null Hypothesis 4.2.9 There is no significant difference between United States subject groups' perceptions about the level of economic development of the origin countries.

Alternate Hypothesis 4.2.9 There is a significant difference between United States subject groups' perceptions about the level of economic development of the origin countries.

The results indicated no significant difference between the groups at the .050 level, with an F-ratio of 1.6063, at $p < .1949$. Therefore the null hypothesis was accepted and the alternate hypothesis was rejected.

Null Hypothesis 4.2.10 There is no significant difference between United States subject groups' perceptions about the level of industrialisation of the origin countries.

Alternate Hypothesis 4.2.10 There is a significant difference between United States subject groups' perceptions about the level of industrialisation of the origin countries.

The results indicated a significant difference between the groups at the .050 level, with an F-ratio of 4.6934, at $p < .0046$. The group mean was 5.8000 for Germany while

Malaysia was 4.4500. Therefore the null hypothesis was rejected and the alternate hypothesis was accepted.

Null Hypothesis 4.2.11 There is no significant difference between United States subject groups' perceptions about the market system of the origin countries.

Alternate Hypothesis 4.2.11 There is a significant difference between United States subject groups' perceptions about the market system of the origin countries.

The results indicated no significant difference between the groups at the .050 level, with an F-ratio of 2.0730, at $p < .1108$. Therefore the null hypothesis was accepted and the alternate hypothesis was rejected.

Null Hypothesis 4.2.12 There is no significant difference between United States subject groups' perceptions about the stability of economic environment of the origin countries.

Alternate Hypothesis 4 2.12 There is a significant difference between United States subject groups' perceptions about the stability of economic environment of the origin countries.

The results indicated no significant difference between the groups at the .050 level, with an F-ratio of 2.1092, at $p < .1060$. Therefore the null hypothesis was accepted and the alternate hypothesis was rejected.

Null Hypothesis 4.2.13 There is no significant difference between United States subject groups' perceptions about the general quality of products of the origin countries.

Alternate Hypothesis 4.2.13 There is a significant difference between United States subject groups' perceptions about the general quality of products of the origin countries.

The results indicated a significant difference between the groups at the .050 level, with an F-ratio of 11.0230, at $p < .0000$. The group means were 5.9000 for Italy and 5.9000 for Germany while Korea was 4.3500. Therefore the null hypothesis was rejected and the alternate hypothesis was accepted.

Null Hypothesis 4.2.14 There is no significant difference between United States subject groups' perceptions about the mass production system of the origin countries.

Alternate Hypothesis 4.2.14 There is a significant difference between United States subject groups' perceptions about the mass production system of the origin countries.

The results indicated a significant difference between the groups at the .050 level, with an F-ratio of 3.6951, at $p < .0154$. The group means were 5.1000 for Germany, 4.9000 for Malaysia and 4.7000 for Korea while Italy was 3.8500. Therefore the null hypothesis was rejected and the alternate hypothesis was accepted.

Null Hypothesis 4.2.15 There is no significant difference between United States subject groups' perceptions about the level of technological research of the origin countries.

Alternate Hypothesis 4.2.15 There is a significant difference between United States subject groups' perceptions about the level of technological research of the origin countries.

The results indicated a significant difference between the groups at the .050 level, with an F-ratio of 4.6968, at $p < .0046$. The group mean was 5.3500 for Germany while Italy was 3.9500. Therefore the null hypothesis was rejected and the alternate hypothesis was accepted.

Null Hypothesis 4.2.16 There is no significant difference between United States subject groups' perceptions about the level of labour costs of the origin countries.

Alternate Hypothesis 4.2.16 There is a significant difference between United States subject groups' perceptions about the level of labour costs of the origin countries.

The results indicated a significant difference between the groups at the .050 level, with an F-ratio of 9.0704, at $p < .0000$. The group means were 4.7500 for Germany and 4.6000 for Italy while Malaysia was 3.1000. Therefore the null hypothesis was rejected and the alternate hypothesis was accepted.

Null Hypothesis 4.2.17 There is no significant difference between United States subject groups' perceptions about the literacy rate of the origin countries.

Alternate Hypothesis 4.2.17 There is a significant difference between United States subject groups' perceptions about the literacy rate of the origin countries.

The results indicated no significant difference between the groups at the .050 level, with an F-ratio of 1.4563, at $p < .2332$. Therefore the null hypothesis was accepted and the alternate hypothesis was rejected.

Null Hypothesis 4.2.18 There is no significant difference between United States subject groups' perceptions about the welfare system of the origin countries.

Alternate Hypothesis 4.2.18 There is a significant difference between United States subject groups' perceptions about the welfare system of the origin countries.

The results indicated a significant difference between the groups at the .050 level, with an F-ratio of 2.9180, at $p < .0395$. The group mean was 4.9500 for Germany while Korea was 3.8000. Therefore the null hypothesis was rejected and the alternate hypothesis was accepted.

Table 6.2

The Test Results of Hypotheses on Country Image and Significance Comparison Between Groups of Country of Origin; Country of Target: United States

Hypo-thesis No.	Hypo-thesis Tests	Country Image Factors		Comparison by Mean	
4.2.1	Reject	Knowledge of the Country (C1)	Very little	K < I < G < M	Very much
4.2.2	Reject	Knowledge about Politics (C2)	Very little	I < K < G < M	Very much
4.2.3	Reject	Knowledge about Economy (C3)	Very little	K < I < G < M	Very much
4.2.4	Reject	Knowledge of Tech. Adv. (C4)	Very little	I < K < G < M	Very much
4.2.5	Accept	Knowledge of Socio-Culture (C5)	Very little	K < I < G < M	Very much
4.2.6	Accept	Political Stability (C6)	Unstable	K < I < M < G	Stable
4.2.7	Reject	Government Style (C7)	Military	K < M < G < I	Civilian
4.2.8	Accept	Political System (C8)	Autocratic	K < M < G < I	Democratic
4.2.9	Accept	Economic Development (C9)	Underdeveloped	I < K < M < G	Developed
4.2.10	Reject	Industrialisation (C10)	Not very	M < I < K < G	Very
4.2.11	Accept	Market System (C11)	Centrally planned	K < G < M < I	Free market
4.2.12	Accept	Economic Environment (C12)	Unstable	K < I < G < M	Stable
4.2.13	Reject	Product Quality (C13)	Very low	K < M < G < I	Very high
4.2.14	Reject	Production System (C14)	Very little	I < K < M < G	Very much
4.2.15	Reject	Technological Research (C15)	Very low	I < K < M < G	Very high
4.2.16	Reject	Labour Costs (C16)	Very low	M < K < I < G	Very high
4.2.17	Accept	Literacy Rate (C17)	Very low	I < M < K < G	Very high
4.2.18	Reject	Welfare System (C18)	Very little	K < I < M < G	A great deal
4.2.19	Accept	Living Standard (C19)	Very low	K < M < I < G	Very high

Note : G for Germany, I for Italy, K for Korea, and M for Malaysia

Null Hypothesis 4.2.19 There is no significant difference between United States subject groups' perceptions about the living standards of the origin countries.

Alternate Hypothesis 4.2.19 There is a significant difference between United States subject groups' perceptions about the living standards of the origin countries.

The results indicated no significant difference between the groups at the .050 level, with an F-ratio of 2.2457, at $p < .0898$. Therefore the null hypothesis was accepted and the alternate hypothesis was rejected.

6.2.3 Country of Target : Hong Kong

Null Hypothesis 4.3.1 There is no significant difference between Hong Kong subject groups' level of general knowledge about the origin countries.

Alternate Hypothesis 4.3.1 There is a significant difference between Hong Kong subject groups' level of general knowledge about the origin countries.

The results indicated no significant difference between the groups at the .050 level, with an F-ratio of .2422, at $p < .8666$. Therefore the null hypothesis was accepted and the alternate hypothesis was rejected.

Null Hypothesis 4.3.2 There is no significant difference between Hong Kong subject groups' level of general knowledge about the politics of the origin countries.

Alternate Hypothesis 4.3.2 There is a significant difference between Hong Kong subject groups' level of general knowledge about the politics of the origin countries.

The results indicated no significant difference between the groups at the .050 level, with an F-ratio of 1.6091, at $p < .1943$. Therefore the null hypothesis was accepted and the alternate hypothesis was rejected.

Null Hypothesis 4.3.3 There is no significant difference between Hong Kong subject groups' level of general knowledge about the economy of the origin countries.

Alternate Hypothesis 4.3.3 There is a significant difference between Hong Kong subject groups' level of general knowledge about the economy of the origin countries.

The results indicated no significant difference between the groups at the .050 level, with an F-ratio of .1415, at $p < .9438$. Therefore the null hypothesis was accepted and the alternate hypothesis was rejected.

Null Hypothesis 4.3.4 There is no significant difference between Hong Kong subject groups' level of general knowledge about the technological advancement of the origin countries.

Alternate Hypothesis 4.3.4 There is a significant difference between Hong Kong subject groups' level of general knowledge about the technological advancement of the origin countries.

The results indicated no significant difference between the groups at the .050 level, with an F-ratio of .7715, at $p < .5135$. Therefore the null hypothesis was accepted and the alternate hypothesis was rejected.

Null Hypothesis 4.3.5 There is no significant difference between Hong Kong subject groups' level of general knowledge about the socio-culture of the origin countries.

Alternate Hypothesis 4.3.5 There is a significant difference between Hong Kong subject groups' level of general knowledge about the socio-culture of the origin countries.

The results indicated no significant difference between the groups at the .050 level, with an F-ratio of 1.1104, at $p < .3502$. Therefore the null hypothesis was accepted and the alternate hypothesis was rejected.

Null Hypothesis 4.3.6 There is no significant difference between Hong Kong subject groups' perceptions about the stability of political environment of the origin countries.

Alternate Hypothesis 4.3.6 There is a significant difference between Hong Kong subject groups' perceptions about the stability of political environment of the origin countries.

The results indicated no significant difference between the groups at the .050 level, with an F-ratio of .9752, at $p < .4090$. Therefore the null hypothesis was accepted and the alternate hypothesis was rejected.

Null Hypothesis 4.3.7 There is no significant difference between Hong Kong subject groups' perceptions about the government style of the origin countries.

Alternate Hypothesis 4.3.7 There is a significant difference between Hong Kong subject groups' perceptions about the government style of the origin countries.

The results indicated a significant difference between the groups at the .050 level, with an F-ratio of 4.0980, at $p < .0095$. The group mean was 4.4000 for Italy while Germany was 3.1500. Therefore the null hypothesis was rejected and the alternate hypothesis was accepted.

Null Hypothesis 4.3.8 There is no significant difference between Hong Kong subject groups' perceptions about the political system of the origin countries.

Alternate Hypothesis 4.3.8 There is a significant difference between Hong Kong subject groups' perceptions about the political system of the origin countries.

The results indicated a significant difference between the groups at the .050 level, with an F-ratio of 2.8511, at $p < .0429$. The group mean was 4.3500 for Italy while Korea was 3.2000. Therefore the null hypothesis was rejected and the alternate hypothesis was accepted.

Null Hypothesis 4.3.9 There is no significant difference between Hong Kong subject groups' perceptions about the level of economic development of the origin countries.

Alternate Hypothesis 4.3.9 There is a significant difference between Hong Kong subject groups' perceptions about the level of economic development of the origin countries.

The results indicated a significant difference between the groups at the .050 level, with an F-ratio of 3.3641, at $p < .0229$. The means were 4.7500 for Korea and 4.5500 for Italy while Malaysia was 3.6500. Therefore the null hypothesis was rejected and the alternate hypothesis was accepted.

Null Hypothesis 4.3.10 There is no significant difference between Hong Kong subject groups' perceptions about the level of industrialisation of the origin countries.

Alternate Hypothesis 4.3.10 There is a significant difference between Hong Kong subject groups' perceptions about the level of industrialisation of the origin countries.

The results indicated a significant difference between the groups at the .050 level, with an F-ratio of 2.9695, at $p < .0371$. The group means were 4.6000 for Korea and 4.5500 for Germany while Italy was 3.8000. Therefore the null hypothesis was rejected and the alternate hypothesis was accepted.

Null Hypothesis 4.3.11 There is no significant difference between Hong Kong subject groups' perceptions about the market system of the origin countries.

Alternate Hypothesis 4.3.11 There is a significant difference between Hong Kong subject groups' perceptions about the market system of the origin countries

The results indicated no significant difference between the groups at the .050 level, with an F-ratio of 2.2998, at $p < .0840$. Therefore the null hypothesis was accepted and the alternate hypothesis was rejected.

Null Hypothesis 4.3.12 There is no significant difference between Hong Kong subject groups' perceptions about the stability of economic environment of the origin countries

Alternate Hypothesis 4.3.12 There is a significant difference between Hong Kong subject groups' perceptions about the stability of economic environment of the origin countries.

The results indicated no significant difference between the groups at the .050 level, with an F-ratio of .9554, at $p < .4183$. Therefore the null hypothesis was accepted and the alternate hypothesis was rejected.

Null Hypothesis 4.3.13 There is no significant difference between Hong Kong subject groups' perceptions about the general quality of products of the origin countries.

Alternate Hypothesis 4.3.13 There is a significant difference between Hong Kong subject groups' perceptions about the general quality of products of the origin countries.

The results indicated a significant difference between the groups at the .050 level, with an F-ratio of 12.5345, at $p < .0000$. The group means were 5.4500 for Italy, 5.1000 for Germany and 4.4500 for Korea while Malaysia was 3.9000. Therefore the null hypothesis was rejected and the alternate hypothesis was accepted.

Null Hypothesis 4.3.14 There is no significant difference between Hong Kong subject groups' perceptions about the mass production system of the origin countries.

Alternate Hypothesis 4.3.14 There is a significant difference between Hong Kong subject groups' perceptions about the mass production system of the origin countries.

The results indicated no significant difference between the groups at the .050 level, with an F-ratio of .9875, at $p < .4033$. Therefore the null hypothesis was accepted and the alternate hypothesis was rejected.

Null Hypothesis 4.3.15 There is no significant difference between Hong Kong subject groups' perceptions about the level of technological research of the origin countries.

Alternate Hypothesis 4.3.15 There is a significant difference between Hong Kong subject groups' perceptions about the level of technological research of the origin countries.

The results indicated a significant difference between the groups at the .050 level, with an F-ratio of 5.1015, at $p < .0029$. The group means were 4.3500 for Germany, 4.3000 for Korea and 4.1500 for Italy while Malaysia was 3.4000. Therefore the null hypothesis was rejected and the alternate hypothesis was accepted.

Null Hypothesis 4.3.16 There is no significant difference between Hong Kong subject groups' perceptions about the level of labour costs of the origin countries.

Alternate Hypothesis 4.3.16 There is a significant difference between Hong Kong subject groups' perceptions about the level of labour costs of the origin countries.

The results indicated a significant difference between the groups at the .050 level, with an F-ratio of 16.5430, at $p < .0000$. The group means were 4.3500 for Italy and 4.0500 for Germany and 3.7500 for Korea while Malaysia was 2.4000. Therefore the null hypothesis was rejected and the alternate hypothesis was accepted.

Null Hypothesis 4.3.17 There is no significant difference between Hong Kong subject groups' perceptions about the literacy rate of the origin countries.

Alternate Hypothesis 4.3.17 There is a significant difference between Hong Kong subject groups' perceptions about the literacy rate of the origin countries.

The results indicated no significant difference between the groups at the .050 level, with an F-ratio of 2.5055, at $p < .0654$. Therefore the null hypothesis was accepted and the alternate hypothesis was rejected.

Table 6.3

The Test Results of Hypotheses on Country Image and Significance Comparison Between Groups of Country of Origin; Country of Target: Hong Kong

Hypo-thesis No.	Hypo-thesis Tests	Country Image Factors		Comparison by Mean	
4.3.1	Accept	Knowledge of the Country (C1)	Very little	I < M < K < G	Very much
4.3.2	Accept	Knowledge about Politics (C2)	Very little	I < G < M < K	Very much
4.3.3	Accept	Knowledge about Economy (C3)	Very little	I < K < G < M	Very much
4.3.4	Accept	Knowledge of Tech. Adv. (C4)	Very little	I < M < K < G	Very much
4.3.5	Accept	Knowledge of Socio-Culture (C5)	Very little	G < I < M < K	Very much
4.3.6	Accept	Political Stability (C6)	Unstable	G < K < M < I	Stable
4.3.7	Reject	Government Style (C7)	Military	G < K < M < I	Civilian
4.3.8	Reject	Political System (C8)	Autocratic	K < G < M < I	Democratic
4.3.9	Reject	Economic Development (C9)	Underdeveloped	M < G < I < K	Developed
4.3.10	Reject	Industrialisation (C10)	Not very	I < M < G < K	Very
4.3.11	Accept	Market System (C11)	Centrally planned	K < M < G < I	Free market
4.3.12	Accept	Economic Environment (C12)	Unstable	M < G < K < I	Stable
4.3.13	Reject	Product Quality (C13)	Very low	M < K < G < I	Very high
4.3.14	Accept	Production System (C14)	Very little	I < K < G < M	Very much
4.3.15	Reject	Technological Research (C15)	Very low	M < I < K < G	Very high
4.3.16	Reject	Labour Costs (C16)	Very low	M < K < G < I	Very high
4.3.17	Accept	Literacy Rate (C17)	Very low	M < G < K < I	Very high
4.3.18	Reject	Welfare System (C18)	Very little	M < K < G < I	A great deal
4.3.19	Reject	Living Standard (C19)	Very low	M < G < K < I	Very high

Note ; G for Germany, I for Italy, K for Korea, and M for Malaysia

Null Hypothesis 4.3.18 There is no significant difference between Hong Kong subject groups' perceptions about the welfare system of the origin countries.

Alternate Hypothesis 4.3.18 There is a significant difference between Hong Kong subject groups' perceptions about the welfare system of the origin countries.

The results indicated a significant difference between the groups at the .050 level, with an F-ratio of 3.2487, at $p < .0264$. The group means were 4.4500 for Italy and 4.4000 for Germany while Malaysia was 3.5000. Therefore the null hypothesis was rejected and the alternate hypothesis was accepted.

Null Hypothesis 4.3.19 There is no significant difference between Hong Kong subject groups' perceptions about the living standards of the origin countries.

Alternate Hypothesis 4.3.19 There is a significant difference between Hong Kong subject groups' perceptions about the living standards of the origin countries.

The results indicated a significant difference between the groups at the .050 level, with an F-ratio of 7.9030, at $p < .0001$. The group means were 4.9500 for Italy, 4.6500 for Korea and 4.4500 for Germany while Malaysia was 3.5000. Therefore the null hypothesis was rejected and the alternate hypothesis was accepted.

6.2.4 Country of Target: Australia

Null Hypothesis 4.4.1 There is no significant difference between Australian subject groups' level of general knowledge about the origin countries.

Alternate Hypothesis 4.4.1 There is a significant difference between Australian subject groups' level of general knowledge about the origin countries.

The results indicated no significant difference between the groups at the .050 level, with an F-ratio of 1.8985, at $p < .1370$. Therefore the null hypothesis was accepted and the alternate hypothesis was rejected.

Null Hypothesis 4.4.2 There is no significant difference between Australian subject groups' level of general knowledge about the politics of the origin countries.

Alternate Hypothesis 4.4.2 There is a significant difference between Australian subject groups' level of general knowledge about the politics of the origin countries.

The results indicated no significant difference between the groups at the .050 level, with an F-ratio of .1357, at $p < .9385$. Therefore the null hypothesis was accepted and the alternate hypothesis was rejected.

Null Hypothesis 4.4.3 There is no significant difference between Australian subject groups' level of general knowledge about the economy of the origin countries.

Alternate Hypothesis 4.4.3 There is a significant difference between Australian subject groups' level of general knowledge about the economy of the origin countries.

The results indicated no significant difference between the groups at the .050 level, with an F-ratio of .4183, at $p < .7403$. Therefore the null hypothesis was accepted and the alternate hypothesis was rejected.

Null Hypothesis 4.4.4 There is no significant difference between Australian subject groups' level of general knowledge about the technological advancement of the origin countries.

Alternate Hypothesis 4.4.4 There is a significant difference between Australian subject groups' level of general knowledge about the technological advancement of the origin countries.

The results indicated no significant difference between the groups at the .050 level, with an F-ratio of 1.0536, at $p < .3739$. Therefore the null hypothesis was accepted and the alternate hypothesis was rejected.

Null Hypothesis 4.4.5 There is no significant difference between Australian subject groups' level of general knowledge about the socio-culture of the origin countries

Alternate Hypothesis 4.4.5 There is a significant difference between Australian subject groups' level of general knowledge about the socio-culture of the origin countries.

The results indicated no significant difference between the groups at the .050 level, with an F-ratio of 2 2222, at $p < .0924$ Therefore the null hypothesis was accepted and the alternate hypothesis was rejected.

Null Hypothesis 4.4 6 There is no significant difference between Australian subject groups' perceptions about the stability of political environment of the origin countries.

Alternate Hypothesis 4 4.6 There is a significant difference between Australian subject groups' perceptions about the stability of political environment of the origin countries.

The results indicated no significant difference between the groups at the .050 level, with an F-ratio of 2.0748, at $p < .1106$. Therefore the null hypothesis was accepted and the alternate hypothesis was rejected.

Null Hypothesis 4.4.7 There is no significant difference between Australian subject groups' perceptions about the government style of the origin countries.

Alternate Hypothesis 4.4.7 There is a significant difference between Australian subject groups' perceptions about the government style of the origin countries.

The results indicated no significant difference between the groups at the .050 level, with an F-ratio of 1.9624, at $p < .1268$. Therefore the null hypothesis was accepted and the alternate hypothesis was rejected.

Null Hypothesis 4.4.8 There is no significant difference between Australian subject groups' perceptions about the political system of the origin countries.

Alternate Hypothesis 4.4.8 There is a significant difference between Australian subject groups' perceptions about the political system of the origin countries.

The results indicated a significant difference between the groups at the .050 level, with an F-ratio of 4 4161, at $p < .0064$. The group means were 4.5000 for Germany, 4 4000 for Italy and 4.2500 for Korea while Malaysia was 3.1000. Therefore the null hypothesis was rejected and the alternate hypothesis was accepted.

Null Hypothesis 4.4.9 There is no significant difference between Australian subject groups' perceptions about the level of economic development of the origin countries.

Alternate Hypothesis 4.4.9 There is a significant difference between Australian subject groups' perceptions about the level of economic development of the origin countries.

The results indicated no significant difference between the groups at the .050 level, with an F-ratio of 1.7993, at $p < .1545$. Therefore the null hypothesis was accepted and the alternate hypothesis was rejected.

Null Hypothesis 4.4.10 There is no significant difference between Australian subject groups' perceptions about the level of industrialisation of the origin countries.

Alternate Hypothesis 4.4.10 There is a significant difference between Australian subject groups' perceptions about the level of industrialisation of the origin countries.

The results indicated a significant difference between the groups at the .050 level, with an F-ratio of 4.6757, at $p < .0047$. The group *means* were 5.2000 for Korea and 5.1000 for Germany while Malaysia was 4.2000. Therefore the null hypothesis was rejected and the alternate hypothesis was accepted.

Null Hypothesis 4.4.11 There is no significant difference between Australian subject groups' perceptions about the market system of the origin countries.

Alternate Hypothesis 4.4.11 There is a significant difference between Australian subject groups' perceptions about the *market system of the origin countries.*

The results indicated no significant difference between the groups at the .050 level, with an F-ratio of 1.7896, at $p < .1563$. Therefore the null hypothesis was accepted and the alternate hypothesis was rejected.

Null Hypothesis 4.4.12 There is no significant difference between Australian subject groups' perceptions about the stability of economic environment of the origin countries.

Alternate Hypothesis 4.4.12 There is a significant difference between Australian subject groups' perceptions about the stability of economic environment of the origin countries.

The results indicated no significant difference between the groups at the .050 level, with an F-ratio of 1385, at $p < .9367$. Therefore the null hypothesis was accepted and the alternate hypothesis was rejected.

Null Hypothesis 4.4 13 There is no significant difference between Australian subject groups' perceptions about the general quality of products of the origin countries.

Alternate Hypothesis 4.4.13 There is a significant difference between Australian subject groups' perceptions about the general quality of products of the origin countries.

The results indicated a significant difference between the groups at the .050 level, with an F-ratio of 15.9901, at $p < .0000$. The group means were 5.9500 for Italy and 5.5500 for Germany while Malaysia was 3.8500. Therefore the null hypothesis was rejected and the alternate hypothesis was accepted.

Null Hypothesis 4.4.14 There is no significant difference between Australian subject groups' perceptions about the mass production system of the origin countries.

Alternate Hypothesis 4.4.14 There is a significant difference between Australian subject groups' perceptions about the mass production system of the origin countries.

The results indicated no significant difference between the groups at the .050 level, with an F-ratio of 2.7237, at $p < .0501$. Therefore the null hypothesis was accepted and the alternate hypothesis was rejected.

Null Hypothesis 4.4.15 There is no significant difference between Australian subject groups' perceptions about the level of technological research of the origin countries.

Alternate Hypothesis 4.4.15 There is a significant difference between Australian subject groups' perceptions about the level of technological research of the origin countries.

The results indicated a significant difference between the groups at the .050 level, with an F-ratio of 3.7145, at $p < .0150$. The group mean was 5.1000 for Germany while Malaysia was 3.8500. Therefore the null hypothesis was rejected and the alternate hypothesis was accepted.

Null Hypothesis 4.4.16 There is no significant difference between Australian subject groups' perceptions about the level of labour costs of the origin countries.

Alternate Hypothesis 4.4.16 There is a significant difference between Australian subject groups' perceptions about the level of labour costs of the origin countries.

The results indicated a significant difference between the groups at the .050 level, with an F-ratio of 8.7676, at $p < .0000$. The group means were 4.4000 for Germany and

4.0000 for Italy while Malaysia was 2.6500. Therefore the null hypothesis was rejected and the alternate hypothesis was accepted.

Null Hypothesis 4.4.17 There is no significant difference between Australian subject groups' perceptions about the literacy rate of the origin countries.

Alternate Hypothesis 4.4.17 There is a significant difference between Australian subject groups' perceptions about the literacy rate of the origin countries.

The results indicated a significant difference between the groups at the .050 level, with an F-ratio of 5.9258, at $p < .0011$. The group means were 4.8000 for Germany, 4.4000 for Italy and 4.1000 for Korea while Malaysia was 3.3500. Therefore the null hypothesis was rejected and the alternate hypothesis was accepted.

Null Hypothesis 4.4.18 There is no significant difference between Australian subject groups' perceptions about the welfare system of the origin countries.

Alternate Hypothesis 4.4.18 There is a significant difference between Australian subject groups' perceptions about the welfare system of the origin countries.

The results indicated no significant difference between the groups at the .050 level, with an F-ratio of 2.5685, at $p < .0605$. Therefore the null hypothesis was accepted and the alternate hypothesis was rejected.

Null Hypothesis 4 4.19 There is no significant difference between Australian subject groups' perceptions about the living standards of the origin countries.

Alternate Hypothesis 4.4.19 There is a significant difference between Australian subject groups' perceptions about the living standards of the origin countries.

The results indicated a significant difference between the groups at the .050 level, with an F-ratio of 4.0517, at $p < .0100$. The group means were 4.8000 for Germany and 4.7000 for Italy while Malaysia was 3.6500. Therefore the null hypothesis was rejected and the alternate hypothesis was accepted.

Table 6.4

The Test Results of Hypotheses on Country Image and Significance Comparison Between Groups of Country of Origin; Country of Target: Australia

Hypo-thesis No.	Hypo-thesis Tests	Country Image Factors	Comparison by Mean		
4.4.1	Accept	Knowledge of the Country (C1)	Very little	M < G < K < I	Very much
4.4.2	Accept	Knowledge about Politics (C2)	Very little	I < M < K < G	Very much
4.4.3	Accept	Knowledge about Economy (C3)	Very little	K < M < I < G	Very much
4.4.4	Accept	Knowledge of Tech. Adv. (C4)	Very little	I < M < K < G	Very much
4.4.5	Accept	Knowledge of Socio-Culture (C5)	Very little	G < M < K < I	Very much
4.4.6	Accept	Political Stability (C6)	Unstable	I < K < G < M	Stable
4.4.7	Accept	Government Style (C7)	Military	M < G < K < I	Civilian
4.4.8	Reject	Political System (C8)	Autocratic	M < K < I < G	Democratic
4.4.9	Accept	Economic Development (C9)	Underdeveloped	M < I < K < G	Developed
4.4.10	Reject	Industrialisation (C10)	Not very	M < I < G < K	Very
4.4.11	Accept	Market System (C11)	Centrally planned	M < K < G < I	Free market
4.4.12	Accept	Economic Environment (C12)	Unstable	I < G < M < K	Stable
4.4.13	Reject	Product Quality (C13)	Very low	M < K < G < I	Very high
4.4.14	Accept	Production System (C14)	Very little	I < G < M < K	Very much
4.4.15	Reject	Technological Research (C15)	Very low	M < I < K < G	Very high
4.4.16	Reject	Labour Costs (C16)	Very low	M < K < I < G	Very high
4.4.17	Reject	Literacy Rate (C17)	Very low	M < K < I < G	Very high
4.4.18	Accept	Welfare System (C18)	Very little	M < I < K < G	A great deal
4.4.19	Reject	Living Standard (C19)	Very low	M < K < I < G	Very high

Note ; G for Germany, I for Italy, K for Korea, and M for Malaysia

6.3 Product Image Tests

Using ANOVA the product image of the prototype automobile is tested by each country of target which represents each continent as a consumer market.[ii] The results are summarised at the end of each country of target which are Table 6.5 for the United Kingdom, Table 6.6 for the United States, Table 6.7 for Hong Kong, and Table 6.8 for Australia.

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6.3.1 Country of Target : United Kingdom

Null Hypothesis 5.1.1 There is no significant difference between UK subject groups' level of interests in the prototype car products. Alternate Hypothesis 5.1.1 There is a significant difference between UK subject groups' level of interests in the prototype car products.

The results indicated no significant difference between the groups at the .050 level, with an F-ratio of .6068, at $p < .6126$. Therefore the null hypothesis was accepted and the alternate hypothesis was rejected.

Null Hypothesis 5.1.2 There is no significant difference between UK subject groups' perceptions concerning the quality of the prototype car products. Alternate Hypothesis 5.1.2 There is a significant difference between UK subject groups' perceptions concerning the quality of the prototype car products.

The results indicated a significant difference between the groups at the .050 level, with an F-ratio of 8.3810, at $p < .0001$. The group means were 6.0000 for Germany, 5.5000 for Italy and 5.3500 for Korea while Malaysia was 4.5000. Therefore the null hypothesis was rejected and the alternate hypothesis was accepted.

Null Hypothesis 5.1.3 There is no significant difference between UK subject groups' level of feelings on pride of ownership of the prototype car products.

Alternate Hypothesis 5.1.3 There is a significant difference between UK subject groups' level of feelings on pride of ownership of the prototype car products.

The results indicated no significant difference between the groups at the .050 level, with an F-ratio of 3.9570, at $p < .0112$. The group means were 5 9000 for Germany and 5.8000 for Italy while Malaysia was 5.0000. Therefore the null hypothesis was rejected and the alternate hypothesis was accepted.

Null Hypothesis 5.1.4 There is no significant difference between UK subject groups' feelings about social class of ownership for the prototype car products.

Alternate Hypothesis 5 1.4 There is a significant difference between UK subject groups' feelings about social class of ownership for the prototype car products.

The results indicated no significant difference between the groups at the 050 level, with an F-ratio of 2.1513, at $p < .1007$. Therefore the null hypothesis was accepted and the alternate hypothesis was rejected.

Null Hypothesis 5.1.5 There is no significant difference between UK subject groups' level of recognition of the brand of prototype car products.

Alternate Hypothesis 5.1.5 There is a significant difference between UK subject groups' level of recognition of the brand of prototype car products

The results indicated no significant difference between the groups at the .050 level, with an F-ratio of .4467, at $p < .7203$. Therefore the null hypothesis was accepted and the alternate hypothesis was rejected.

Null Hypothesis 5.1.6 There is no significant difference between UK subject groups' perceptions of the technical advancement of the prototype car products.

Alternate Hypothesis 5.1.6 There is a significant difference between UK subject groups' perceptions of the technical advancement of the prototype car products

The results indicated a significant difference between the groups at the 050 level, with an F-ratio of 2.9096, at $p < .0399$. The group means were 6.1000 for Germany while Malaysia was 5.2500. Therefore the null hypothesis was rejected and the alternate hypothesis was accepted.

Null Hypothesis 5 1 7 There is no significant difference between UK subject groups' perceptions of the workmanship of the prototype car products

Alternate Hypothesis 5 1.7 There is a significant difference between UK subject groups' perceptions of the workmanship of the prototype car products

The results indicated a significant difference between the groups at the 050 level, with an F-ratio of 4 7235, at $p < .0045$. The group mean was 6 1000 for Germany while Malaysia was 5.0000 Therefore the null hypothesis was rejected and the alternate hypothesis was accepted

Null Hypothesis 5 1.8 There is no significant difference between UK subject groups' perceptions of the performance of the prototype car products

Alternate Hypothesis 5.1.8 There is a significant difference between UK subject groups' perceptions of the performance of the prototype car products

The results indicated no significant difference between the groups at the .050 level, with an F-ratio of 2.0378, at $p < .1157$. Therefore the null hypothesis was accepted and the alternate hypothesis was rejected.

Null Hypothesis 5.1.9 There is no significant difference between UK subject groups' perceptions of the level of technological design of the prototype car products.

Alternate Hypothesis 5.1.9 There is a significant difference between UK subject groups' perceptions of the level of technological design of the prototype car products.

The results indicated no significant difference between the groups at the .050 level, with an F-ratio of 2.1765, at $p < .0977$. Therefore the null hypothesis was accepted and the alternate hypothesis was rejected.

Null Hypothesis 5.1.10 There is no significant difference between UK subject groups' perceptions of the styling of prototype car products.

Alternate Hypothesis 5.1.10 There is a significant difference between UK subject groups' perceptions of the styling of prototype car products.

The results indicated no significant difference between the groups at the 050 level, with an F-ratio of 1.2201, at $p < .3082$. Therefore the null hypothesis was accepted and the alternate hypothesis was rejected.

Null Hypothesis 5.1.11 There is no significant difference between UK subject groups' perceptions of the colour availability of the prototype car products

Alternate Hypothesis 5.1.11 There is a significant difference between UK subject groups' perceptions of the colour availability of the prototype car products.

The results indicated no significant difference between the groups at the .050 level, with an F-ratio of 5.0267, at $p < .0031$. The group means were 5.4000 for Italy, 5.3500 for Germany and 5.3000 for Korea while Malaysia was 4.3500. Therefore the null hypothesis was rejected and the alternate hypothesis was accepted.

Table 6.5

The Test Results of Hypotheses Product Image and Significance Comparison Between Groups of Country of Origin; Country of Target: United Kingdom

Hypo-thesis No.	Hypo-thesis Tests	Product Image Factors		Comparison by Mean	
5.1.1	Accept	Level of Interest (P1)	Very low	M < G < K < I	Very high
5.1.2	Reject	Overall Quality (P2)	Very low	M < K < I < G	Very high
5.1.3	Reject	Pride of Ownership (P3)	Little pride	M < K < I < G	Great pride
5.1.4	Accept	Social Class (P4)	Lower	K < M < I < G	Upper
5.1.5	Accept	Brand Recognition (P5)	Very difficult	G < M < K < I	Very easy
5.1.6	Reject	Technical Advancement (P6)	Not well advanced	M < I < K < G	Well advanced
5.1.7	Reject	Workmanship (P7)	Not very careful	M < I < K < G	*Very careful*
5.1.8	Accept	Performance (P8)	Very low	M < K < G < I	Very high
5.1.9	Accept	Technological Design (P9)	Imitative	M < K < I < G	Innovative
5.1.10	Accept	Styling (P10)	Unfashionable	M < G < K < I	Fashionable
5.1.11	Reject	Colour (P11)	Very unappealing	M < K < G < I	Very appealing
5.1.12	Reject	Price (P12)	Very inexpensive	M < K < G < I	Very expensive

Note ; G for Germany, I for Italy, K for Korea, and M for Malaysia

Null Hypothesis 5.1.12 There is no significant difference between UK subject groups' perceptions of the price of prototype car products.

Alternate Hypothesis 5.1.12 There is a significant difference between UK subject groups' perceptions of the price of prototype car products.

The results indicated no significant difference between the groups at the .050 level, with an F-ratio of 3.9622, at p < .0111. The group means were 5.7500 for Italy and 5.7500 for Germany while Malaysia was 4.6000. Therefore the null hypothesis was rejected and the alternate hypothesis was accepted.

6.3.2 Country of Target: United States

Null Hypothesis 5.2.1 There is no significant difference between United States subject groups' level of interests in the prototype car products.

Alternate Hypothesis 5.2.1 There is a significant difference between United States subject groups' level of interests in the prototype car products.

The results indicated no significant difference between the groups at the .050 level, with an F-ratio of 1.1448, at p < .3365. Therefore the null hypothesis was accepted and the alternate hypothesis was rejected.

Null Hypothesis 5 2 2 There is no significant difference between United States subject groups' perceptions concerning the quality of the prototype car products.

Alternate Hypothesis 5.2.2 There is a significant difference between United States subject groups' perceptions concerning the quality of the prototype car products.

The results indicated no significant difference between the groups at the .050 level, with an F-ratio of 2.5802, at p < 0597. Therefore the null hypothesis was accepted and the alternate hypothesis was rejected.

Null Hypothesis 5.2.3 There is no significant difference between United States subject groups' level of feelings on pride of ownership of the prototype car products.

Alternate Hypothesis 5.2.3 There is a significant difference between United States subject groups' level of feelings on pride of ownership of the prototype car products.

The results indicated no significant difference between the groups at the .050 level, with an F-ratio of 2.5811, at $p < .0596$. Therefore the null hypothesis was accepted and the alternate hypothesis was rejected.

Null Hypothesis 5.2.4 There is no significant difference between United States subject groups' feelings about social class of ownership for the prototype car products

Alternate Hypothesis 5.2.4 There is a significant difference between United States subject groups' feelings about social class of ownership for the prototype car products.

The results indicated no significant difference between the groups at the 050 level, with an F-ratio of 1 5902, at $p < .1987$. Therefore the null hypothesis was accepted and the alternate hypothesis was rejected.

Null Hypothesis 5.2 5 There is no significant difference between United States subject groups' level of recognition of the brand of prototype car products.

Alternate Hypothesis 5.2 5 There is a significant difference between United States subject groups' level of recognition of the brand of prototype car products

The results indicated no significant difference between the groups at the .050 level, with an F-ratio of 1.8174, at $p < .1511$. Therefore the null hypothesis was accepted and the alternate hypothesis was rejected.

Null Hypothesis 5.2.6 There is no significant difference between United States subject groups' perceptions of the technical advancement of the prototype car products.

Alternate Hypothesis 5.2.6 There is a significant difference between United States subject groups' perceptions of the technical advancement of the prototype car products.

The results indicated no significant difference between the groups at the .050 level, with an F-ratio of 2.2664, at $p < .0875$. Therefore the null hypothesis was accepted and the alternate hypothesis was rejected.

Null Hypothesis 5.2.7 There is no significant difference between United States subject groups' perceptions of the workmanship of the prototype car products.

Alternate Hypothesis 5.2.7 There is a significant difference between United States subject groups' perceptions of the workmanship of the prototype car products.

The results indicated no significant difference between the groups at the .050 level, with an F-ratio of 1.8144, at $p < .1517$. Therefore the null hypothesis was accepted and the alternate hypothesis was rejected.

Null Hypothesis 5.2.8 There is no significant difference between United States subject groups' perceptions of the performance of the prototype car products.

Alternate Hypothesis 5.2.8 There is a significant difference between United States subject groups' perceptions of the performance of the prototype car products.

The results indicated no significant difference between the groups at the .050 level, with an F-ratio of 2.7193, at $p < .0503$. Therefore the null hypothesis was accepted and the alternate hypothesis was rejected.

Null Hypothesis 5.2.9 There is no significant difference between United States subject groups' perceptions of the level of technological design of the prototype car products.

Alternate Hypothesis 5.2.9 There is a significant difference between United States subject groups' perceptions of the level of technological design of the prototype car products.

The results indicated a significant difference between the groups at the .050 level, with an F-ratio of 3.2985, at $p < .0248$. The group mean was 5.9000 for Germany while Malaysia was 4.7500 Therefore the null hypothesis was rejected and the alternate hypothesis was accepted.

Null Hypothesis 5.2.10 There is no significant difference between United States subject groups' perceptions of the styling of prototype car products.

Alternate Hypothesis 5.2.10 There is a significant difference between United States subject groups' perceptions of the styling of prototype car products.

The results indicated no significant difference between the groups at the .050 level, with an F-ratio of .6199, at $p < .6042$. Therefore the null hypothesis was accepted and the alternate hypothesis was rejected.

Table 6.6

The Test Results of Hypotheses on Product Image and Significance Comparison Between Groups of Country of Origin; Country of Target: United States

Hypo-thesis No.	Hypo-thesis Tests	Product Image Factors		Comparison by Mean	
5.2.1	Accept	Level of Interest (P1)	Very low	I < M < K < G	Very high
5.2.2	Accept	Overall Quality (P2)	Very low	M < K < I < G	Very high
5.2.3	Accept	Pride of Ownership (P3)	Little pride	I < K < M < G	Great pride
5.2.4	Accept	Social Class (P4)	Lower	M < K < I < G	Upper
5.2.5	Accept	Brand Recognition (P5)	Very difficult	M < I < K < G	Very easy
5.2.6	Accept	Technical Advancement (P6)	Not well advanced	M < I < K < G	Well advanced
5.2.7	Accept	Workmanship (P7)	Not very careful	M < I < K < G	Very careful
5.2.8	Accept	Performance (P8)	Very low	M < I < K < G	Very high
5.2.9	Reject	Technological Design (P9)	Imitative	M < K < I < G	Innovative
5.2.10	Accept	Styling (P10)	Unfashionable	I < K < M < G	Fashionable
5.2.11	Accept	Colour (P11)	Very unappealing	M < I < K < G	Very appealing
5.2.12	Accept	Price (P12)	Very inexpensive	M < K < I < G	Very expensive

Note ; G for Germany, I for Italy, K for Korea, and M for Malaysia

Null Hypothesis 5.2.11 . There is no significant difference between United States subject groups' perceptions of the colour availability of the prototype car products.

Alternate Hypothesis 5.2.11 . There is a significant difference between United States subject groups' perceptions of the colour availability of the prototype car products.

The results indicated no significant difference between the groups at the .050 level, with an F-ratio of 2.4783, at $p < .0676$. Therefore the null hypothesis was accepted and the alternate hypothesis was rejected.

Null Hypothesis 5.2.12 There is no significant difference between United States subject groups' perceptions of the price of prototype car products.

Alternate Hypothesis 5.2.12 There is a significant difference between United States subject groups' perceptions of the price of prototype car products.

The results indicated no significant difference between the groups at the .050 level, with an F-ratio of 1.0601, at $p < .3712$. Therefore the null hypothesis was accepted and the alternate hypothesis was rejected.

6.3.3 Country of Target: Hong Kong

Null Hypothesis 5.3.1 There is no significant difference between Hong Kong subject groups' level of interests in the prototype car products.

Alternate Hypothesis 5.3.1 There is a significant difference between Hong Kong subject groups' level of interests in the prototype car products.

The results indicated no significant difference between the groups at the .050 level, with an F-ratio of 1.3312, at $p < .2705$. Therefore the null hypothesis was accepted and the alternate hypothesis was rejected.

Null Hypothesis 5.3.2 There is no significant difference between Hong Kong subject groups' perceptions concerning the quality of the prototype car products.

Alternate Hypothesis 5.3.2 There is a significant difference between Hong Kong subject groups' perceptions concerning the quality of the prototype car products.

The results indicated no significant difference between the groups at the .050 level, with an F-ratio of 1.3872, at $p < .2532$. Therefore the null hypothesis was accepted and the alternate hypothesis was rejected.

Null Hypothesis 5.3.3 There is no significant difference between Hong Kong subject groups' level of feelings on pride of ownership of the prototype car products.

Alternate Hypothesis 5.3.3 There is a significant difference between Hong Kong subject groups' level of feelings on pride of ownership of the prototype car products.

The results indicated a significant difference between the groups at the .050 level, with an F-ratio of 3.5793, at $p < .0177$. The group means were 5.000 for Italy and 4.8000 for Germany while Malaysia was 4.1500. Therefore the null hypothesis was rejected and the alternate hypothesis was accepted.

Null Hypothesis 5.3.4 There is no significant difference between Hong Kong subject groups' feelings about social class of ownership for the prototype car products.

Alternate Hypothesis 5.3.4 There is a significant difference between Hong Kong subject groups' feelings about social class of ownership for the prototype car products.

The results indicated a significant difference between the groups at the .050 level, with an F-ratio of 5.5605, at $p < .0017$. The group means were 5.3500 for Italy and 4.9500 for Germany while Malaysia was 4.3500. Therefore the null hypothesis was rejected and the alternate hypothesis was accepted.

Null Hypothesis 5.3.5 There is no significant difference between Hong Kong subject groups' level of recognition of the brand of prototype car products.

Alternate Hypothesis 5.3.5 There is a significant difference between Hong Kong subject groups' level of recognition of the brand of prototype car products.

The results indicated no significant difference between the groups at the .050 level, with an F-ratio of 2.5992, at $p < .0583$. Therefore the null hypothesis was accepted and the alternate hypothesis was rejected.

Null Hypothesis 5.3.6 There is no significant difference between Hong Kong subject groups' perceptions of the technical advancement of the prototype car products.

Alternate Hypothesis 5.3.6 There is a significant difference between Hong Kong subject groups' perceptions of the technical advancement of the prototype car products.

The results indicated no significant difference between the groups at the .050 level, with an F-ratio of .1328, at $p < .9403$. Therefore the null hypothesis was accepted and the alternate hypothesis was rejected.

Null Hypothesis 5.3.7 There is no significant difference between Hong Kong subject groups' perceptions of the workmanship of the prototype car products.

Alternate Hypothesis 5.3.7 There is a significant difference between Hong Kong subject groups' perceptions of the workmanship of the prototype car products.

The results indicated no significant difference between the groups at the .050 level, with an F-ratio of .3134, at $p < .8156$. Therefore the null hypothesis was accepted and the alternate hypothesis was rejected.

Null Hypothesis 5.3.8 There is no significant difference between Hong Kong subject groups' perceptions of the performance of the prototype car products.

Alternate Hypothesis 5.3.8 There is a significant difference between Hong Kong subject groups' perceptions of the performance of the prototype car products.

The results indicated no significant difference between the groups at the .050 level, with an F-ratio of .9872, at $p < .4034$. Therefore the null hypothesis was accepted and the alternate hypothesis was rejected.

Null Hypothesis 5.3.9 There is no significant difference between Hong Kong subject groups' perceptions of the level of technological design of the prototype car products.

Alternate Hypothesis 5.3.9 There is a significant difference between Hong Kong subject groups' perceptions of the level of technological design of the prototype car products.

The results indicated no significant difference between the groups at the .050 level, with an F-ratio of 1.8161, at $p < .1514$. Therefore the null hypothesis was accepted and the alternate hypothesis was rejected.

Null Hypothesis 5.3.10 There is no significant difference between Hong Kong subject groups' perceptions of the styling of prototype car products.

Alternate Hypothesis 5.3.10 There is a significant difference between Hong Kong subject groups' perceptions of the styling of prototype car products.

The results indicated no significant difference between the groups at the .050 level, with an F-ratio of 1.0417, at $p < .3791$. Therefore the null hypothesis was accepted and the alternate hypothesis was rejected.

Null Hypothesis 5.3.11 There is no significant difference between Hong Kong subject groups' perceptions of the colour availability of the prototype car products.

Alternate Hypothesis 5.3.11 There is a significant difference between Hong Kong subject groups' perceptions of the colour availability of the prototype car products.

The results indicated no significant difference between the groups at the .050 level, with an F-ratio of 1.3702, at $p < .2583$. Therefore the null hypothesis was accepted and the alternate hypothesis was rejected.

Null Hypothesis 5.3.12 There is no significant difference between Hong Kong subject groups' perceptions of the price of prototype car products.

Alternate Hypothesis 5.3.12 There is a significant difference between Hong Kong subject groups' perceptions of the price of prototype car products.

The results indicated a significant difference between the groups at the .050 level, with an F-ratio of 8.6920, at $p < .0000$. The group means were 5.4500 for Italy and 4.8000 for Germany while Malaysia was 4.0000. Therefore the null hypothesis was rejected and the alternate hypothesis was accepted.

Table 6.7

The Test Results of Hypotheses on Product Image and Significance Comparison Between Groups of Country of Origin; Country of Target: Hong Kong

Hypo-thesis No.	Hypo-thesis Tests	Product Image Factors		Comparison by Mean	
5.3.1	Accept	Level of Interest (P1)	Very low	G < I < K < M	Very high
5.3.2	Accept	Overall Quality (P2)	Very low	M < K < G < I	Very high
5.3.3	Reject	Pride of Ownership (P3)	Little pride	M < K < G < I	Great pride
5.3.4	Reject	Social Class (P4)	Lower	M < K < G < I	Upper
5.3.5	Accept	Brand Recognition (P5)	Very difficult	M < I < G < K	Very easy
5.3.6	Accept	Technical Advancement (P6)	Not well advanced	K < M < G < I	Well advanced
5.3.7	Accept	Workmanship (P7)	Not very careful	M < I < G < K	Very careful
5.3.8	Accept	Performance (P8)	Very low	M < G < K < I	Very high
5.3.9	Accept	Technological Design (P9)	Imitative	G < K < M < I	Innovative
5.3.10	Accept	Styling (P10)	Unfashionable	G < K < M < I	Fashionable
5.3.11	Accept	Colour (P11)	Very unappealing	G < M < K < I	Very appealing
5.3.12	Reject	Price (P12)	Very inexpensive	M < K < G < I	Very expensive

Note ; G for Germany, I for Italy, K for Korea, and M for Malaysia

6.3.4 Country of Target : Australia

Null Hypothesis 5.4.1 There is no significant difference between Australian subject groups' level of interests in the prototype car products.

Alternate Hypothesis 5.4.1 There is a significant difference between Australian subject groups' level of interests in the prototype car products.

The results indicated no significant difference between the groups at the .050 level, with an F-ratio of .6175, at $p < .6058$. Therefore the null hypothesis was accepted and the alternate hypothesis was rejected.

Null Hypothesis 5.4.2 There is no significant difference between Australian subject groups' perceptions concerning the quality of the prototype car products.

Alternate Hypothesis 5.4.2 There is a significant difference between Australian subject groups' perceptions concerning the quality of the prototype car products.

The results indicated no significant difference between the groups at the .050 level, with an F-ratio of 2.2018, at $p < .0947$. Therefore the null hypothesis was accepted and the alternate hypothesis was rejected.

Null Hypothesis 5.4.3 There is no significant difference between Australian subject groups' level of feelings on pride of ownership of the prototype car products.

Alternate Hypothesis 5.4.3 There is a significant difference between Australian subject groups' level of feelings on pride of ownership of the prototype car products.

The results indicated no significant difference between the groups at the .050 level, with an F-ratio of 1.6013, at $p < .1961$. Therefore the null hypothesis was accepted and the alternate hypothesis was rejected.

Null Hypothesis 5.4.4 There is no significant difference between Australian subject groups' feelings about social class of ownership for the prototype car products.

Alternate Hypothesis 5.4.4 There is a significant difference between Australian subject groups' feelings about social class of ownership for the prototype car products.

The results indicated a significant difference between the groups at the .050 level, with an F-ratio of 3.7212, at $p < .0149$. The group means were 5.9000 for Italy 5.6000 for Malaysia and 5.6000 for Germany while Korea was 4.8500. Therefore the null hypothesis was rejected and the alternate hypothesis was accepted.

Null Hypothesis 5.4.5 There is no significant difference between Australian subject groups' level of recognition of the brand of prototype car products.

Alternate Hypothesis 5.4.5 There is a significant difference between Australian subject groups' level of recognition of the brand of prototype car products.

The results indicated no significant difference between the groups at the .050 level, with an F-ratio of 1.9137, at $p < .1345$. Therefore the null hypothesis was accepted and the alternate hypothesis was rejected.

Null Hypothesis 5.4.6 There is no significant difference between Australian subject groups' perceptions of the technical advancement of the prototype car products.

Alternate Hypothesis 5.4.6 There is a significant difference between Australian subject groups' perceptions of the technical advancement of the prototype car products.

The results indicated a significant difference between the groups at the .050 level, with an F-ratio of 3.0963, at $p < .0318$. The group means were 6.1500 for Italy and 6.0000 for Germany while Korea was 5.2000. Therefore the null hypothesis was rejected and the alternate hypothesis was accepted.

Null Hypothesis 5.4.7 There is no significant difference between Australian subject groups' perceptions of the workmanship of the prototype car products.

Alternate Hypothesis 5.4.7 There is a significant difference between Australian subject groups' perceptions of the workmanship of the prototype car products.

The results indicated a significant difference between the groups at the .050 level, with an F-ratio of 6.2845, at $p < .0007$. The group mean was 5.9500 for Italy and 5.8000 for Germany while Korea was 4.6000. Therefore the null hypothesis was rejected and the alternate hypothesis was accepted.

Null Hypothesis 5.4.8 There is no significant difference between Australian subject groups' perceptions of the performance of the prototype car products.

Alternate Hypothesis 5.4.8 There is a significant difference between Australian subject groups' perceptions of the performance of the prototype car products.

The results indicated a significant difference between the groups at the .050 level, with an F-ratio of 5.1785, at $p < .0026$. The group means were 5.8000 for Italy, 5.4500 for Malaysia and 5.4500 for Germany while Korea was 4.6500. Therefore the null hypothesis was rejected and the alternate hypothesis was accepted.

Null Hypothesis 5.4.9 There is no significant difference between Australian subject groups' perceptions of the level of technological design of the prototype car products.

Alternate Hypothesis 5.4.9 There is a significant difference between Australian subject groups' perceptions of the level of technological design of the prototype car products.

The results indicated no significant difference between the groups at the .050 level, with an F-ratio of 1.7991, at $p < .1545$. Therefore the null hypothesis was accepted and the alternate hypothesis was rejected.

Null Hypothesis 5.4.10 There is no significant difference between Australian subject groups' perceptions of the styling of prototype car products.

Alternate Hypothesis 5.4.10 There is a significant difference between Australian subject groups' perceptions of the styling of prototype car products.

The results indicated no significant difference between the groups at the .050 level, with an F-ratio of .3243, at $p < .8078$. Therefore the null hypothesis was accepted and the alternate hypothesis was rejected.

Null Hypothesis 5.4.11 There is no significant difference between Australian subject groups' perceptions of the colour availability of the prototype car products.

Alternate Hypothesis 5.4.11 There is a significant difference between Australian subject groups' perceptions of the colour availability of the prototype car products.

The results indicated no significant difference between the groups at the .050 level, with an F-ratio of 1.1269, at $p < .3436$. Therefore the null hypothesis was accepted and the alternate hypothesis was rejected.

Null Hypothesis 5.4.12 There is no significant difference between Australian subject groups' perceptions of the price of prototype car products.

Alternate Hypothesis 5.4.12 There is a significant difference between Australian subject groups' perceptions of the price of prototype car products.

The results indicated a significant difference between the groups at the .050 level, with an F-ratio of 5.9333, at $p < .0011$. The group means were 6.0500 for Italy and 5.6500

for Germany while Korea was 4.7000. Therefore the null hypothesis was rejected and the alternate hypothesis was accepted.

Table 6.8

The Test Results of Hypotheses on Product Image and Significance Comparison Between Groups of Country of Origin; Country of Target: Australia

Hypo-thesis No.	Hypo-thesis Tests	Product Image Factors		Comparison by Mean	
5.4.1	Accept	Level of Interest (P1)	Very low	K < I < G < M	Very high
5.4.2	Accept	Overall Quality (P2)	Very low	K < M < G < I	Very high
5.4.3	Accept	Pride of Ownership (P3)	Little pride	K < G < M < I	Great pride
5.4.4	Reject	Social Class (P4)	Lower	K < G < M < I	Upper
5.4.5	Accept	Brand Recognition (P5)	Very difficult	M < I < G < K	Very easy
5.4.6	Reject	Technical Advancement (P6)	Not well advanced	K < M < G < I	Well advanced
5.4.7	Reject	Workmanship (P7)	Not very careful	K < M < G < I	Very careful
5.4.8	Reject	Performance (P8)	Very low	K < G < M < I	Very high
5.4.9	Accept	Technological Design (P9)	Imitative	K < M < G < I	Innovative
5.4.10	Accept	Styling (P10)	Unfashionable	G < I < K < M	Fashionable
5.4.11	Accept	Colour (P11)	Very unappealing	K < G < M < I	*Very appealing*
5.4.12	Reject	Price (P12)	Very inexpensive	K < M < G < I	Very expensive

Note ; G for Germany, I for Italy, K for Korea, and M for Malaysia

6.4. Purchase Willingness Tests

Using ANOVA the consumers' willingness to purchase the prototype automobile is tested by each country of target (COT) which represents each continent as a consumer market. The results are summarised in Table 6.9.

6.4.1 Country of Target : United Kingdom

Null Hypothesis 6.1.1 There is no significant difference between UK subject groups' purchase willingness for the prototype car products.

Alternate Hypothesis 6.1.1 There is a significant difference between UK subject groups' purchase willingness for the prototype car products.

The results indicated no significant difference between the groups at the .050 level, with an F-ratio of 1.4062, at $p < .2475$. Therefore the null hypothesis was accepted and the alternate hypothesis was rejected.

6.4.2 Country of Target : United States

Null Hypothesis 6.2.1 There is no significant difference between United States subject groups' purchase willingness for the prototype car products.

Alternate Hypothesis 6.2.1 There is a significant difference between United States subject groups' purchase willingness for the prototype car products.

The results indicated no significant difference between the groups at the .050 level, with an F-ratio of 1.4913, at $p < .2237$. Therefore the null hypothesis was accepted and the alternate hypothesis was rejected.

6.4.3 Country of Target : Hong Kong

Null Hypothesis 6.3.1 There is no significant difference between Hong Kong subject groups' purchase willingness for the prototype car products.

Alternate Hypothesis 6.3.1 There is a significant difference between Hong Kong subject groups' purchase willingness for the prototype car products.

The results indicated no significant difference between the groups at the .050 level, with an F-ratio of 1.1678, at $p < .3276$. Therefore the null hypothesis was accepted and the alternate hypothesis was rejected.

6.4.4 Country of Target : Australia

Null Hypothesis 6.4.1 There is no significant difference between Australian subject groups' purchase willingness for the prototype car products the new car products from origin countries.

Alternate Hypothesis 6.4.1 There is a significant difference between Australian subject groups' purchase willingness for the new car products from origin countries.

The results indicated no significant difference between the groups at the .050 level, with an F-ratio of .7260, at $p < .5396$. Therefore the null hypothesis was accepted and the alternate hypothesis was rejected.

Table 6.9

The Test Results of Hypothesis on Purchase Willingness and Significance Comparison Between Groups of Country of Origin by Country of Target

Hypothesis No.	Hypothesis Tests	Country of Target	Mean Comparison		
6.1.1	Accept	United Kingdom	Very unlikely	M < G < K < I	Very likely
6.2.1	Accept	United States	Very unlikely	I < G < K < M	Very likely
6.3.1	Accept	Hong Kong	Very unlikely	M < K < G < I	Very likely
6.4.1	Accept	Australia	Very unlikely	M < I < K < G	Very likely

Note ; G for Germany, I for Italy, K for Korea, and M for Malaysia

6.5 Summary

As follow-up procedure of multivariate analysis of variance (MANOVA), this chapter presented the results of the hypotheses tests of each consumer groups' beliefs about the country, its products and their purchase willingness using one-way ANOVA. It was to compare the statistical significance between the consumer groups. It also examined the role of country image in consumers' attitudes toward the prototype automobiles which come from the four countries. The results of one-way ANOVA results, as further data analyses, were presented by each group of country of target (COT) for country image and product image. Table 6.10 and Table 6.11 show the results of the hypotheses tests about the countries of origin (COO) and its prototype products, respectively.

Table 6.10

The Results of the Hypotheses Tests on Country Image

Hypothesis No	Country Image Factors	Decision on Null Hypothesis			
		UK	US	HK	AU
4.1	Knowledge of the Country (C1)	Accept	Reject	Accept	Accept
4.2	Knowledge about Politics (C2)	Accept	Reject	Accept	Accept
4.3	Knowledge about Economy (C3)	Accept	Reject	Accept	Accept
4.4	Knowledge of Tech. Adv. (C4)	Accept	Reject	Accept	Accept
4.5	Knowledge of Socio-Culture (C5)	Reject	Accept	Reject	Accept
4.6	Political Stability (C6)	Reject	Accept	Accept	Accept
4.7	Government Style (C7)	Reject	Reject	Reject	Accept
4.8	Political System (C8)	Reject	Accept	Reject	Reject
4.9	Economic Development (C9)	Reject	Accept	Reject	Accept
4.10	Industrialisation (C10)	Reject	Reject	Reject	Reject
4.11	Market System (C11)	Reject	Accept	Accept	Accept
4.12	Economic Environment (C12)	Reject	Accept	Accept	Accept
4.13	Product Quality (C13)	Reject	Reject	Reject	Reject
4.14	Production System (C14)	Accept	Reject	Accept	Accept
4.15	Technological Research (C15)	Reject	Reject	Reject	Reject
4.16	Labour Costs (C16)	Reject	Reject	Reject	Reject
4.17	Literacy Rate (C17)	Reject	Accept	Accept	Reject
4.18	Welfare System (C18)	Reject	Reject	Reject	Accept
4.19	Living Standard (C19)	Reject	Accept	Reject	Reject

In general, the test results indicate that consumer groups have quite different levels of beliefs about the countries of origin. Consumer groups from the United Kingdom, Hong Kong and Australia have no significant differences about the country familiarity factors. Otherwise, United States consumer groups have quite different level of country familiarity about the four origin countries. Those country familiarity factors are general knowledge about the country (C1), politics (C2), economy (C3), and technological advancement (C4).

UK consumers have significantly different beliefs about the all country image items with an exception of mass production system (C14). They believe that Germany is the most stable and advanced country in terms of politics, economic, and socio-cultural, while Malaysia is the least. Conversely, US consumers show no significant differences of their beliefs about the origin countries' political stability (C6), political system (C8), economic development (C9), market system (C11), economic environment (C12) and living standard (C19). US consumers have very significant favourable beliefs about Germany's production system (C14), technological research (C15), and welfare system (C18), while they believe that Germany's labour costs are the highest.

Hong Kong consumers have strong favourable beliefs about Italy in terms of its politics (C7, C8), product quality (C13), welfare system (C18) and living standard (C19), while they have the least favourable images of Malaysia's product quality (C13), technological research (C15), welfare system (C18) and living standard (C19). But Hong Kong consumers believe that Germany's technological researches are very well advanced, and Korea's industrialisation and economic development are also advanced.

Australian consumers also have strong favourable images about Germany in terms of its advancedness of politics, economic development and high level of socio-cultural system while they have the least favourable images of Malaysia's political system (C8), industrialisation (C10), product quality (C13), technological research (C15) and living standard (C19). Australian consumers also believe that the labour costs in Germany are higher than any other country.

There is a significantly different level of consumers' beliefs about industrialisation (C10), product quality (C13), technological research (C15) and labour costs (C16), because all consumer groups rejected those null hypotheses.

Table 6.11

The Results of the Hypotheses Tests on Product Image and Purchase Willingness

Hypothesis No	Country Image Factors	Decision on Null Hypothesis			
		UK	US	HK	AU
5.1	Level of Interest (P1)	Accept	Accept	Accept	Accept
5.2	Overall Quality (P2)	Reject	Accept	Accept	Accept
5.3	Pride of Ownership (P3)	Reject	Accept	Reject	Accept
5.4	Social Class (P4)	Accept	Accept	Reject	Reject
5.5	Brand Recognition (P5)	Accept	Accept	Accept	Accept
5.6	Technical Advancement (P6)	Reject	Accept	Accept	Reject
5.7	Workmanship (P7)	Reject	Accept	Accept	Reject
5.8	Performance (P8)	Accept	Accept	Accept	Reject
5.9	Technological Design (P9)	Accept	Reject	Accept	Accept
5.10	Styling (P10)	Accept	Accept	Accept	Accept
5.11	Colour (P11)	Reject	Accept	Accept	Accept
5.12	Price (P12)	Reject	Accept	Reject	Reject
5.13	Purchase Willingness (P13)	Accept	Accept	Accept	Accept

In general, the test results indicate that all consumer groups have no different level of beliefs about the prototype car products from the four countries of origin. In particular, there is no significant difference in consumers' level of interest in the products. This was indicated by the null hypotheses of consumers' product interests (P1), brand recognition (P5) and styling (P10) which were accepted.

Consumers from the United Kingdom have no significant differences of belief about the owners' social class (P4), performance (P8), technological design (P9) of the prototype car products, while they have significantly different beliefs of overall quality (P2), pride of ownership (P3), technical advancement (P6), workmanship (P7), colour (P11) and

price (P12) of the products. UK consumers have most favourable images of Germany's product quality (P2), pride of ownership (P3), technical advancement (P6) and workmanship (P7), but they have significant favourable beliefs in the Italian product of colouring (P11) and styling (P10). In general, UK consumers have least favourable images about Malaysian products.

Otherwise, US consumers show no significant differences of their belief about all product image factors with exception of technological design (P9). They believe Germany has highly innovative design technology. In general, US consumers have most favourable beliefs in Germany's car products, while they have least favourable perceptions about the prototype car products from Malaysia.

In general, Hong Kong consumers also show no significant differences of beliefs about the prototype car products. But, they have significantly different beliefs about the pride of ownership (P3), owners' social class (P4) and price (P12) of the products. The most favourable images are of Italian products, and least favourable images of Malaysian products.

Australian consumers also have strong favourable images about Italian car products in terms of owners' social class (P4), technical advancement (P6), workmanship (P7), performance (P8) and price (P12), while they have the least favourable images about the Korean car products of those factors.

There is no significant level of differences among the consumer groups' buying intentions of the prototype car products, because all consumer groups accepted the null hypothesis for their willingness to purchase the car products from the four origin countries. Nevertheless, consumers from the UK and Hong Kong show most willingness to buy the products from Italy, and Australian consumers intend to buy German car products. While the United States consumers are willing to purchase Malaysian car products, consumers from the UK, Hong Kong and Australia have least purchase willingness of Malaysian products.

Chapter 7 will present the summary of the study and report the findings from the data analyses, as hypotheses tests, in Chapter 5 and Chapter 6. The results of further data analyses are summarised in tabular formats and discussed. This is followed by the implications of the findings and suggestions for future research as the conclusion of this study.

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[i] The results of one-way ANOVA tests for Country Image are summarised with the means of COT by COO groups in Appendix E.

[ii] The results of one-way ANOVA tests for Product Image are summarised with the means of COT by COO groups in Appendix F.

Chapter 7
Discussion and Conclusions

7.1 Introduction

This chapter summarises the findings which should help to fill some of the gaps left void by previous research. Previous research does not clearly define the interaction between consumer markets as country of target (COT) and the product producer as country of origin (COO). Thus, the study described here has moved beyond single cue studies by manipulating the constructs of country of target and country of origin. This research also contributes to the body of knowledge on product-country image studies in a number of specific ways: first, prototypes of a new product, rather than existing products are employed as stimuli; second, the construct of country of target (COT) is introduced as a complement to that of the country of origin (COO).

For the summary of findings and discussions by COT groups, geographical and consumers behavioural aspects of countries of target are illustrated in the following section. Hofstede's cultural dimensions for the countries of target and the volume of car sales within COT are summarised in Table 7.1 and Table 7.2, respectively. Finally, the findings of this study are presented and are also discussed to examine the role of country image in consumers' prototype product evaluations. The discussions are presented by consumer groups as country of target and by country of origin groups of the prototype automobiles. Next, as a conclusion, implications of the findings and possible directions for future research are presented.

7.2 Geographical and Behavioural Aspects of COT

Major research on product-country images has been conducted in mainly one country, the United States (Han and Terpstra, 1988; Hong and Wyer, 1990; Martin and Eroglu,

1993), although some has been conducted cross-nationally (Nagashima, 1970; Narayana, 1981; Papadopoulos et al., 1987; Roth and Romeo, 1992). In this study, four countries of target (COT) were selected from behavioural and geographic aspects. Those countries are also categorised in different levels of economic development.

The cultural factor in globalisation - especially in the 'triad' of trade between US, the Asian-Pacific region and Europe - is becoming critically important. Therefore, four continents are selected as countries of target to test consumers' perceptions about the country and its products, and their purchase willingness to the prototype automobiles. Those countries from four continents are United Kingdom, United States, Hong Kong and Australia which could be differentiated in four groups of geographical consumer market and two levels of economic development of the country (see Table 4.2 in Chapter 4).

The consumer markets also can be fundamentally differentiated based on cultural characteristeics. Cultural differences in terms of collectivism-individualism are clearly shown in Hofstede's (1983) famous study, which highlights the contrast between Asians and Anglo-Americans in terms of their cultural orientation. These may be reflected in the consumer values and attitudes of the four countries of target. Table 7.1 shows summarised Hofstede's cultural dimensions for those countries of target.

Table 7.1

COT National Values for Hofstede's Cultural Dimensions

Country of Target	Dimensions			
	Individualism (vs. Collectivism)	Large or Small Power Distance	Strong or Weak Uncertainty Avoidance	Masculinity vs. Femininity
United Kingdom	High	Small	Weak (Village)	Masculinity
United States	High	Small	Weak (Village)	Masculinity
Hong Kong	Low	Large	Weak (Family)	Masculinity
Australia	High	Small	Weak (Village)	Masculinity

The consumer groups of country of target can be differentiated as Asian and Anglo-American cultures. The characteristics of Asian behaviour are to suit a situation, to suit a community, harmonious, conservative, restrained, indirect, self-assured and introvert. By contrast, the characteristics of Anglo-American behaviour are true to principles, based on legal principles, dynamic, facing conflict, open, direct, self-confident and extrovert (Chung, 1991).

The cultural characteristics of consumer markets are closely related to the marketing stategy of the specific products, i.e., automobiles. Thus, the volume of car sales within countries of target are briefly summarised in Table 7.2 with key statistics of those countries as consuming markets of automobile products. Whilst four countries of target have similar level of GDP per head and car parc per head (with exception of Hong Kong), those countries of target have quite different characteristics in terms of population, GDP, volume of new car sales and production of car products.

Table 7.2

Car Sales within the Countries of Target (COT)

Car Sales (Total Sales)		Country of Target: United Kingdom (1.945,400)	United States (8,632,900)	Hong Kong (24.895)	Australia (488,400)
Country of Origin (%)*	Germany	292,811 (15.1)	205.249 (2.4)	11,843 (47.6)	20,603 (4.2)
	Italy	74,725 (3.8)	597 (-)	247 (1.0)	159 (-)
	Korea	44,211 (2.3)	184.224 (2.1)	1.462 (5.9)	69,017 (14.1)
	Malaysia**	12,452 (0.6)	nil (-)	nil (-)	nil (-)
Key Statistics, 1995[a]					
Population (million)		58	264	6	18
GDP (US$ bn)		1.127	7,081	143	355
GDP per head (US$)		18.875	27.505	21.833	19.240
New Car Sales ('000)		1.945	8.633	25	488
Car Parc per head		0.43	0.56	0.06	0.46
Car Production ('000)		1,532	6,332	nil	310

Notes: (a) 1995 figures; (b) * % of Total Sales in COT; (c) ** 1994 figure; (d) [a] Estimated figures;

Source: KAMA, SMMT, EIU Reports

Table 7.2 shows some contrasts with the findings of this study. In particular, the United States consumers showed the highest level of purchase willingness to Malaysian car products, while they have the lowest level of perceptions about Malaysian cars and there is no import volume of Malaysian car products in the United States market. It indicates that the United States consumers' willingness to buy Malaysian cars related to their knowledge about that country (see Table 6.2 in Chapter 6). It also indicates that the pattern of imports are not supported by the findings of the research (i.e., for Hong Kong and Australian consumers), because the role of product-country images in counsumers' product evaluations act differently in different consumer markets.

7.3 Summary of the Findings

The purpose of this study was to identify whether country image acts as a halo or a summary construct function in consumers' attitudes towards the products. To fulfil this purpose, this study employed two concepts, the country of target (COT) and the country of origin (COO). The COO construct was defined by previous research, while the COT construct was developed by the author in order to examine the role of the consumer's home market. The findings of this study are summarised by the two constructs of COT and COO which were tested through the sub-constructs of country image, product image, and purchase willingness.

7.3.1 Country Image Tests by COT and COO

The results of hypothesis tests on country image by country of target (COT) are summarised in Table 7.3 (see also Appendix E). There are significant differences between the general knowledge level of the subject groups about the four countries of origin. The United States respondents show the highest mean scores for the factors of general knowledge of the country (C1; 3.2500), knowledge about politics (C2; 2.5125), economy (C3; 2.8750), technological advancement (C4; 2.9375), and socio-culture (C5;

3.2125), while Hong Kong respondents show the lowest mean scores, 2.2000, 1.7625, 2.0000, 2.1250, 2.4125 for the above factors, respectively.

All null hypotheses on the level of the consumer groups' (COT) general knowledge about the countries were rejected. This means there are significant differences between consumer groups' levels of knowledge about the countries of origin, particularly with regard to factors of general knowledge of the country (C1), knowledge about politics (C2), economy (C3), technological advancement (C4), and socio-culture (C5) of the country.

Table 7.3

The Results of Hypotheses Tests on Country Image

Country of Target				Country of Origin		
Significance level	Decision on Null Hypothesis	Hypothesis Number	Country Image Factors	Hypothesis Number	Decision on Null Hypothesis	Significance level
<.05	Reject	1.1.1	Knowledge about the Country (C1)	1.2.1	Accept	<.05
<.05	Reject	1.1.2	Knowledge about Politics (C2)	1.2.2	Accept	<.05
<.05	Reject	1.1.3	Knowledge about Economy (C3)	1.2.3	Accept	<.05
<.05	Reject	1.1.4	Knowledge of Tech. Advance. (C4)	1.2.4	Reject	<.05
<.05	Reject	1.1.5	Knowledge of Socio-Culture (C5)	1.2.5	Accept	<.05
<.05	Reject	1.1.6	Political Stability (C6)	1.2.6	Reject	<.05
<.05	Accept	1.1.7	Government Style (C7)	1.2.7	Reject	<.05
<.05	Accept	1.1.8	Political System (C8)	1.2.8	Reject	<.05
<.05	Reject	1.1.9	Economic Development (C9)	1.2.9	Reject	<.05
<.05	Reject	1.1.10	Industrialisation (C10)	1.2.10	Reject	<.05
<.05	Accept	1.1.11	Market System (C11)	1.2.11	Reject	<.05
<.05	Reject	1.1.12	Economic Environment (C12)	1.2.12	Accept	<.05
<.05	Reject	1.1.13	Product Quality (C13)	1.2.13	Reject	<.05
<.05	Reject	1.1.14	Production System (C14)	1.2.14	Reject	<.05
<.05	Reject	1.1.15	Technological Research (C15)	1.2.15	Reject	<.05
<.05	Reject	1.1.16	Labour Costs (C16)	1.2.16	Reject	<.05
<.05	Reject	1.1.17	Literacy Rate (C17)	1.2.17	Reject	<.05
<.05	Reject	1.1.18	Welfare System (C18)	1.2.18	Reject	<.05
<.05	Accept	1.1.19	Living Standard (C19)	1.2.19	Reject	<.05

There are significant differences between the consumer groups' perceptions of the country, with regard to political stability (C6), economic development (C9), industrialisation (C10), economic environment (12), product quality in general (C13), production system (C14), technological research (C15), labour costs (C16), literacy rate (C17), and welfare system (C18). On the other hand, there are no significant differences between the consumer groups' beliefs about the country image items of government style (C7), political system (C8), market system (C11), and living standard (C19).

The results of country image tests by country of origin (COO) are also summarised in Table 7.3. There are no significant differences between COO groups with regard to consumer groups' levels of general knowledge about the countries. Null hypotheses concerning consumer groups' level of general knowledge on COO countries were accepted, including general knowledge of the country (C1), knowledge about politics (C2), economy (C3), and socio-culture (C5) of the country. There are significant differences with regard to technological advancement (C4) as a item of knowledge about a country.

There are also significant differences between COO groups with regard to beliefs concerning the country image variables of political stability (C6), government style (C7), political system (C8), economic development (C9), industrialisation (C10), market system (C11), product quality in general (C13), production system (C14), technological research (C15), labour costs (C16), literacy rate (C17), welfare system (C18), and living standard (C19). There is no significant difference between COO groups with regard to their beliefs concerning the country image factor of economic environment (C12).

The results of hypotheses tests on country image by COT and by COO would be summarised as follows;

- country familiarity factors are functional, and do act differently in the different consumer markets of COT.
- country familiarity factors with an exception of technological advancement item are not functional, and do not act differently for the country of origin (COO).

- in general, all country image factors are functional in the consumer markets with exceptions of items with regard to government style, political system, market system, and living standard, and for the country of origin with an exception of economic environment item.

7.3.2 Product Image Tests by COT and COO

The results of the hypotheses tests on product image by country of target (COT) are summarised in Table 7.4 (see also Appendix F).

Table 7.4

The Resuts of Hypotheses Tests on Product Image

Country of Target				Country of Origin		
Signi-ficance level	Decision on Null Hypo-thesis	Hypo-thesis Number	Product Image Factors	Hypo-thesis Number	Decision on Null Hypo-thesis	Signi-ficance level
<.05	Accept	2.1.1	Interest (P1)	2.2.1	Accept	<.05
<.05	Reject	2.1.2	Overall Quality (P2)	2.2.2	Reject	<.05
<.05	Reject	2.1.3	Pride of Ownership (P3)	2.2.3	Reject	<.05
<.05	Reject	2.1.4	Social Class (P4)	2.2.4	Reject	<.05
<.05	Accept	2.1.5	Brand Recognition (P5)	2.2.5	Reject	<.05
<.05	Reject	2.1.6	Technical Advancement (P6)	2.2.6	Reject	<.05
<.05	Reject	2.1.7	Workmanship (P7)	2.2.7	Reject	<.05
<.05	Reject	2.1.8	Performance (P8)	2.2.8	Reject	<.05
<.05	Reject	2.1.9	Technological Design (P9)	2.2.9	Reject	<.05
<.05	Reject	2.1.10	Styling (P10)	2.2.10	Accept	<.05
<.05	Reject	2.1.11	Colour (P11)	2.2.11	Reject	<.05
<.05	Reject	2.1.12	Price (P12)	2.2.12	Reject	<.05
<.05	Accept	2.1.13	Buying Willingness (P13)	2.2.13	Accept	<.05

There are significant differences between the consumer groups' perceptions regarding the overall quality (P2), pride of ownership (P3), owners' social class (P4), technical advancement (P6), workmanship (P7), performance (P8), technological design (P9),

styling (P10), colour (P11) and the price (P12) of the prototype automobiles. There are no significant differences between the consumer groups' beliefs regarding the interest of the product (P1) and brand recognition (P5). Those findings are related to factor 1 and factor 2 in factor analysis results discussed in Chapter 4.

The results of the hypotheses test on product image by country of origin (COO) are also summarised in Table 7.4 as above. There are significant differences between COO groups regarding consumers' beliefs on overall quality (P2), pride of ownership (P3), owners' social class (P4), brand recognition (P5), technical advancement (P6), workmanship (P7), performance (P8), technological design (P9), colour (P11) and price (P12) of the prototype automobiles from the origin countries. There are no significant differences between COO groups regarding consumer' beliefs on interest (P1) and styling (P10) of the products.

The results of hypotheses tests on product image by COT and by COO would be summarised as follows;

- With exceptions of interest and brand recognition items, all product image factors are functional, and do act differently in the different consumer markets of COT.
- With exceptions of interest and styling items, all product image factors are also functional, and do act differently for the country of origin (COO).
- in general, all product image factors are functional in the consumer markets and for the country of origin.

7.3.3. Purchase Willingness Tests by COT and COO

Consumers' purchase willingness (C13) was analysed by the country of target and by the country of origin. These hypotheses (Null hypotheses 3.1.1 and 3.2.1) were accepted. This means that there are no significant differences between groups of target and between groups of country origin with regard to consumer willingness to purchase the

prototype automobile products. The statistics are also summarised in Table 5.9 in Chapter 5 and Table 7.4 in this chapter.

The test results show that there is no significant difference between consumer groups willingness to buy the prototype car products. Furthermore, there is no significant difference of purchase willingness by country of origin of the car producers. These are correlated to the results of hypotheses tests of product interest (P1), brand recognition (P5) and product styling (P10). Thus further analyses were proceeded by each individual COT groups by COO groups. The results of the tests were shown in Table 6.9 in Chapter 6, and are discussed in the next section.

7.3.4 The Findings from Further Data analysis

Further data analysis was conducted in Chapter 6 using one-way analysis of variance (ANOVA) to compare the statistical significance between the groups of country of origin (COO) by each country of target (COT) as consumer markets. The test results of the country image were presented by each COT in tabular form in Table 6.1 for the United Kingdom, Table 6.2 for the United States, Table 6.3 for Hong Kong, and Table 6.4 for Australia.

The test results of product image were also presented by each COT in tabular form in Table 6.5 for the United Kingdom, Table 6.6 for the United States, Table 6.7 for Hong Kong, and Table 6.8 for Australia. Finally, the test results of the consumers' purchase willingness for the prototype automobiles are summarised in Table 6.9 in Chapter 6. More discussions are presented in the following section.

The results indicate broadly that consumer groups have quite different level of knowledge and beliefs as country images about the origin countries (COO). The test results also show that consumer groups have different level of beliefs of the products which come from the four countries of origin. However, there is no significant difference

by country of target and country of origin regarding consumer willingness to purchase the prototype car products.

7.4 Discussion

The purpose of this experimental research was to define the role of the country image in consumer product evaluations. Furthermore, this study focused on the examination of interaction between the two constructs, the country of target (COT) and the country of origin (COO), in consumers' evaluations on the prototype automobile products. The discussions presented follow the order of cell number in the analysis matrix presented in Table 4.10 which is 4 x 4 design.

7.4.1 Country of Target : United Kingdom

Consumers in the UK show a higher level of general knowledge about Italy, in comparison with Germany, Korea and Malaysia. However, they have strong favourable country image perceptions regarding Germany's politics, economic development, technological advancement, and higher level of socio-cultural development. UK consumers have a lower level of general knowledge, and least favourable country image perceptions about Malaysia. They have the most favourable perceptions of German products, and UK least favourable perceptions are of Malaysian products. This indicates that consumers' favourable knowledge about a country, and favourable beliefs of it are positively correlated with their beliefs concerning the country's products.

7.4.2 Country of Target : United States

Consumers in the United States show a higher level of knowledge about Malaysia as a country, in comparison with Germany, Italy, and Korea. They have a strong favourable

country image of Germany's politics, economic development, technological advancement, and higher level of socio-cultural development. US consumers have the lowest level of knowledge and beliefs of Korea.

Consumers in the United States have favourable perceptions of German products and Korean products, while their least favourable perceptions are of Malaysian products. This indicates that consumers' favourable beliefs concerning a country are positively correlated with consumers' beliefs of its products, but consumers' familiarity of a country is not correlated with their beliefs of its products.

7.4.3 Country of Target : Hong Kong

There are no significant variations shown by Hong Kong consumers with regard to their knowledge levels about the origin countries. Nevertheless, they have strong favourable perceptions regarding the country image of Italy, particularly concerning politics, economic development, technological advancement, and higher level of socio-cultural development. Hong Kong consumers have the lowest level of favourable beliefs of Malaysia.

Consumers in Hong Kong have the most favourable perceptions of Italian products, and the least favourable perceptions of Malaysian products. In this case consumers' favourable beliefs of a country are positively correlated to their beliefs concerning the country's products.

7.4.4 Country of Target : Australia

Consumers in Australia show a higher level of knowledge about Germany, in comparison with Italy, Korea and Malaysia. They also have a strongly favourable country image of Germany, especially on politics, economic development, technological advancement, and

higher level of socio-cultural development. Australian consumers have the lowest level of favourable beliefs about Malaysia.

Nevertheless, they have the most favourable perceptions of Italian products, and the least favourable perceptions of Korean products. In this case consumers' knowledge level about a country and beliefs of the country are not positively correlated with the consumers' beliefs concerning the country's products.

7.4.5 Country of Origin : Germany

Consumers as a whole, as evidenced by the subjects here, show a higher level of knowledge about Germany's economy, politics and technological advancement than Italy, Korea and Malaysia. They also have strongly favourable country image beliefs of German political stability, its political system, economic development, industrialisation, technological research, literacy rate, welfare system and living standard. They believe that labour costs in Germany are higher than any of the three countries of origin.

Consumers as a whole also have the most favourable perceptions of German products in terms of the overall quality, pride of ownership, technical advancement, and workmanship. They also have favourable perceptions of German products with respect to the owners' social class, performance, technological design, styling and colour of the products. Consumers believe the prices of German cars are relatively expensive compared to Korean or Malaysian products.

7.4.6 Country of Origin : Italy

Consumers as a whole, as evidenced by the subjects studied here, show a higher level of general knowledge about the country of Italy and Italian socio-culture in comparison with the "level" of knowledge of Germany, Korea and Malaysia. They also have strong

favourable country image beliefs regarding Italy's government style, political system, market system, product quality in general, literacy rate, and living standards. They believe the labour costs in Italy are higher than in Korea and Malaysia.

Consumers have the most favourable perceptions of Italian products in terms of the owners' social class, performance, technological design, styling and colour of the products. They also have favourable beliefs on Italian products' overall quality, pride of ownership, technical advancement, and workmanship. Consumers believe the prices of Italian cars are the most expensive in comparison with German, Korean and Malaysian products.

7.4.7 Country of Origin : Korea

Consumers as a whole, as evidenced by the subjects studied here, show the lowest level of general knowledge about the country of Korea regarding politics, economy and socio-culture. They also have strong unfavourable country image beliefs regarding Korea's political stability, government style, political system, and market system. Nevertheless, they have favourable beliefs regarding economic development, industrialisation, economic environment, and technological research in Korea.

Consumers as a whole have the most unfavourable perceptions of Korean car products in terms of pride of ownership and owners' social class. However, they have relatively favourable beliefs of Korean products with regard to brand recognition and colour. Consumers believe the prices of Korean cars are inexpensive compared with German and Italian products.

7.4.8 Country of Origin : Malaysia

Consumers as a whole, as evidenced by the subjects studied here, show a lower level of general knowledge about Malaysia with regard to politics, economy, and technological

advancement. They also have strong and unfavourable country image beliefs on Malaysian's economic development, industrialisation, economic environment, product quality in general, technological research, literacy rate, welfare system, and living standard. In contrast, they have relatively favourable perceptions regarding political stability, government style, political system and market system in comparison with Korea. Consumers believe labour costs in Malaysia are the lowest among the countries of origin.

Consumers have the most unfavourable perceptions on Malaysian car products in terms of the overall quality, brand recognition, technical advancement, workmanship, performance, technological design, styling, and colour. They have relatively favourable beliefs of Malaysian products with regard to pride of ownership and the owners' social class in comparison with Korean products. Consumers believe the prices of Malaysian cars are the lowest among the four countries of origin.

7.4.9 Purchase Willingness

Null hypotheses for the purchase willingness were accepted by country of target (COT) and by country of origin (COO) as shown in Table 5.9 in Chapter 5. These hypotheses were presented with (a) "there is no significant difference between subject groups' level of purchase willingness on the prototype car products," for country of target, and (b) "there is no significant difference between countries of origin with consumer groups' purchase willingness of the prototype car products," for country of origin.

Further data analysis also shows the same results in which the hypothesis is accepted by the four consumer groups. The hypothesis is that "there is no significant difference between subject groups' purchase willingness for the prototype car products." The results indicate that there is no significant difference regarding consumer willingness to purchase the prototype car products from the four countries as shown in Table 6.11 of Chapter 6.

Consequently, it is necessary to look at individual consumer groups. Consumers in the UK and Hong Kong show their higher levels of purchase willingness for Italian car products. The United States consumers have the highest willingness to buy Malaysian products, and the lower purchase willingness for Italian products. Consumers in the UK, Hong Kong and Australia have the lowest purchase willingness for Malaysian products. Australian consumers have the highest willingness to purchase German car products. Consumers' purchase willingness for Korean car products is moderate in all COT groups.

7.5 Implications

The findings of this study have revealed several implications for both marketing theory and marketing practitioners. These implications are related to the relationship between country of origin (COO) of the products and country of target (COT) as consumer markets of the products which are associated with the consumer willingness to purchase the products from the four origin countries.

7.5.1 Implications for Marketing Theory

Although a number of studies have been conducted to determine the relationship between consumers' perceptions of a country and their attitudes toward the products made in that country from the mid-1960s, most researches did not provide any reason for not studying the relationship between country of origin (COO) and country of target (COT). Moreover, most of this research merely studied the existence of country of origin effects or the stereotyped images of the existing products. Thus, there is a general lack of investigation into the relationship between country of origin and country of target, and between country image and product image.

The current study contributes to the body of knowledge about country of origin (COO) in a number of specific ways; first, the conceptualisation of a construct for country of target (COT) in which a product is to be marketed, and which is introduced as a complement to that of country of origin; second, prototype products, rather than existing products, are employed as stimuli to investigate consumers' beliefs and attitudes toward the prototype products. On a methodological level, it reduces the mediating effect of product experience and therefore potential contamination of the COO effect; third, experimental 4 x 4 design which are consisted by the different levels of economic development of COO and by different regions of consumer markets of COT. Thus, the results of the study are generalisable to the global market research.

This research also provides very important evidence which the role of country image acts, as halo or a summary construct function, differently in the different markets in consumers product evaluations. For example, in the UK and United States, consumers have willingness to purchase the products which come from a familiar country. In contrast, in Hong Kong, and Australian consumers are willing to purchase the products based on their most favourable beliefs of country and most favourable beliefs of products, respectively.

Eventually, this implication indicates that the construct of country of target (COT) is conceptualised and could be considered as one of constructs for country of origin effect studies.

7.5.2 Managerial Implications

In addition to their theoretical implications, there are a number of implications of the study for practising managers for the development of global marketing strategies. First, this study provides the results as evidence that COT does indeed matter when consumers evaluate products. Then, the study suggests that the construct of country of target (COT) must be considered when building the market entrance or promotional strategies

for consumer markets. Therefore, international marketers should consider that their marketing strategy will have to be customised to individual COT, because consumers from target markets have quite different perceptions about the origin countries and their products.

Second, when the country image and its product image are evaluated in different consumer markets, marketing practitioners can use the survey instrument, which was developed for this study, in order to find out consumers' attitudes toward their products and in order to determine the appropriate marketing strategies for the specific markets.

Third, this study examined consumers attitudes toward the prototype car products with an hypothetical experiment. Thus, it is useful for the manufacturers to create genuinely new products which define rather than simply fit consumer perceptual sets, or differentiate existing products types through technology/radical design. They also can examine the cross-cultural consumer markets as their future markets with this type of experiment.

Fourth, whilst limited and very recent research has been conducted on general consumers reaction to really-new products or prototypes, little or no research has been conducted into the effect of COO on consumer perceptions of prototypes. This is of potentially great value to companies from different countries selling in certain markets, for such pre-knowledge would be enable superior marketing strategies to be devised in advance of a new product launch.

Finally, the findings suggest that, in a competitive industry such as automobiles, it would be useful to have a baseline rating of the target market's opinion of the country in which the product is launched or promoted. It is of interest to the marketing manager to know if potential consumers are favourably or unfavourably biased towards the product's country of origin in a macro sense and if these same potential consumers have similar or differing biases towards their specific products.

7.6 Conclusions

There is no statistical significance between consumer groups' interests on the prototype car products. There is no statistical significance between countries of origin with consumer groups' purchase willingness of the prototype car products. Therefore, it is possible to examine the role of the country image in consumers' product evaluations by country of target (COT). The final findings are summarised in Table 7.5. Table 7.5 shows that the country image acts as both a halo function and a summary construct function in consumers' product evaluations.

Table 7.5

The Role of Country Image

in Consumers Product Evaluations

Country of Target (COT)		Familiarity as Knowledge about the Country of	Favourable Beliefs on the Country of	Favourable Beliefs on the Products from	Purchase Willingness of the Products from
United Kingdom	Most	Italy	Germany	Germany	Italy
	Least	Malaysia	Malaysia	Malaysia	Malaysia
United States	Most	Malaysia	Germany	Germany	Malaysia
	Least	Korea	Korea	Malaysia	Italy
Hong Kong	Most	Korea	Italy	Italy	Italy
	Least	Italy	Malaysia	Malaysia	Malaysia
Australia	Most	Germany	Germany	Italy	Germany
	Least	Malaysia	Malaysia	Korea	Malaysia

Table 7.5 can be explained based on the Figure 3.2 in Chapter 3 which illustrate the causal relationships among the three sub-constructs of country image, product image and consumers attitudes towards the products from that country. The table indicate that there are significant differences between consumer groups as COT of the beliefs about the country and its products. Consumer groups have significantly favourable beliefs toward the more developed countries and their products rather than the less developed countries and their products. Moreover, consumers' overall attitudes toward the products

positively correlated with the levels of economic development of the origin countries of products.

The results of the study provides several insights into the role of the country image about the consumers' attitudes towards the products. This study confirms the general findings that the stereotyping effects of country image and product image exist in consumers' product evaluations. The most important finding of this research is that the role of the country image, as halo function or a summary construct function, acts differently in the different market of country of target (COT). Eventually, the above findings conclude that the construct of country of target is conceptualised for the study of country of origin effects.

7.6.1 Research Limitations

Several limitations may compromise the generalisability of results. As the primary objective of this study was to define the role of country image, as country of origin effects, undergraduate students were used as the population for this study. The subjects consisted of 320 of junior/senior undergraduate students as convenience samples from four countries of target (see Table 5.1). Because it is rarely possible to contact all units in a population, a sample invariably has to be selected (Bryman and Cramer, 1990).

Johansson (1993) noted that when the country of origin effect was inferred from estimated relationships between variables, the use of convenience samples was not a very serious drawback. Thus, in this study, student respondents were used to study the relationship between consumers' perceptions about the countries and its car products, and consumers' buying willingness of the products from the countries of origin.

The use of student samples in consumer research is commonly disparaged, but Liefeld's (1993) results of the meta-analysis do not support this view. Liefeld concluded that if the products employed in experiments were products which students used and part of their

consumer realities, then the use of student samples was appropriate (1994, p.148). It also clearly is evidenced from the Table 2.3 (p.55) and Table 5.1 (p.120).

An overwhelming percentage of other studies in the country of origin area used student samples (Bilkey and Nes, 1982; Ozsomer and Cavusgil, 1991). Undergraduate students have been commonly used in such studies in the past (Eroglu and Machleit, 1989; Hong and Wyer, 1990; Thorelli et al., 1989). Table 2.3 shows that major research used student samples to examine country of origin effects with automobile products (i.e., Erickson, Johansson and Chao, 1984; Halfhill, 1980; Johansson, Douglas and Nonaka, 1985; Johansson and Thorelli, 1985; Lee and Sirgy, 1995; Roth and Romeo, 1992).

In Table 5.1, there is a variety of levels of car ownership. While only 1.3% of Hong Kong respondents owned cars, 81.3% of United States respondents, 78.8% of Australian respondents, and 46.3% of the UK respondents owned cars. As an average, 51.9% of student samples owned cars. Undergraduate students also provide an invaluable contribution to the study, because they are the prospective buyers in the near future and are familiar with car products. Undergraduate students are also important targets for automobile manufacturers since they are likely to buy their first new car soon.

Using students as subjects is usually seen as a limitation of marketing research, because the study to undergraduate students limited the external generalisability of the findings. In addition, experiments using students may lead to an overestimation of country of origin effects. However, students use cars quite often and are familiar with the automobile products used in this study. Therefore, in this instance, the use of students as subjects does not severely limit the results or conclusions.

Product descriptions were created to stimulate respondents to answer the questionnaire about product image and their willingness to buy the products. To help subjects envision the products, pictures of the prototype car were included containing the key features and specifications of the products. But, as noted by Bilkey and Nes (1982), not having the actual products available for subjects' consideration limits subject involvement in the study and, therefore, becomes a limitation of this study.

This study was carried out in four countries from four continents, i.e., Europe, North America, Asia, and Oceania, with convenience sampling groups using only one experimental prototype product - cars. The results must therefore be interpreted carefully for generalisation. Because of the use of only one product, prototype automobiles, it does not imply that other products may produce similar results. Therefore, evidence across studies using different products should provide results that are either consistent or inconsistent with the findings of this study.

In this sense, further research should be conducted with larger samples from more countries as country of target (COT) and use different types of products. Furthermore, future studies should use other respondents to examine the relationship between a country specific image and the image of products made in that country. Other groups of respondents may differ from students in their attitude toward products due to differences in their lifestyles.

7.6.2 Directions for Future Research

Whilst much attention has been paid to the effect due to the origin of a particular product, less has been paid to the effect of the country at which a product is targeted, or sold in. Thus, as the complement of country of origin (COO), we employed the construct of country of target (COT). In a sense COT is always present in all COO studies, but typically latent; for the COO effect is always a relative effect: it is the perception of the one of the other.

Thus, several implications for future research in this area were evident from the present research. First, collecting data from more countries would strengthen the wider degree of economic development of country of target (COT). This data would give clear dimensions on the level of consumers such as subjects from more developed, less

developed and developing countries. This information would also permit drawing conclusions applicable to the globalised consumer markets.

Second, this study evaluated only one product, prototype automobiles, with consumer groups from the four target market areas. Widening the range of products and/or product categories under the conditions of this experiment would expand more valuable implications and possible conclusions for marketing theory and marketing practitioners.

Third, future research should also consider substituting real general consumers rather than convenience sampling of students as subjects. This substitution would involve a more appropriate subject pool when considering products which would most likely not be purchased by students. Also, non-student subjects would provide a basis for comparing between age groups for differences in perceptions toward different countries of origin and their products.

Fourth, Kamins and Nagashima's (1993) finding suggested that the image of a country's products is changeable, even in a short period of time. Specifically, it has been shown that image tends to vary significantly between countries, to influence consumer attitudes and purchase behaviour, and also it has the potential to be changed over time (Cattin, Jolibert and Lohnes, 1982; Han, 1989; Nagashima, 1970, 1977; Martin and Eroglu, 1992). Therefore, a longitudinal approach would be extremely useful over a longer time period under the condition of this experiment.

Finally, the results of this research implied that consumers' perceptions of a country and its products were significantly different in different consumer markets. Thus, further research should ascertain the construct of country of target (COT) through the cross-cultural investigation of prototypes and existing products.

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APPENDIX A
Covering Letter to the Administrator

14th October 1996

Dear ,

Thanks for agreeing to help us with this research. We're looking at consumers' perceptions of country-of-origin effects both on countries and their products. Your groups' opinions will represent the opinions of your country's (Australia's) consumers of four different countries (Korea, Malaysia, Italy and Germany). 100 questionnaires are enclosed which consist of the 4 countries. of 25 each. Please follow the instructions which are given below - the exercise doesn't take long - maximum half an hour.

INSTRUCTIONS

A. Subject Grouping

1. About 100 subjects (undergraduate students) should be split into 4 groups.
2. Each group consists of around 25 subjects.
3. Each group answers a particular country's questionnaire (e.g. 1 group does Korea. another Italy and so forth) and for the product supposedly coming from that country. As you will see, the questionnaires are actually identical, with the only variable being the country's name, and the implicit suggestion that the experimental car we're studying comes from that country.

B. Steps for Data Collection

First Distribute the Country Image Questionnaires

1. Distribute the questionnaires of country image,
2. Allow about 5 minutes to answer. and then
3. Collect the questionnaires.

Now Distribute the Brochure and the Product Image Questionnaire, MAKING SURE that each group gets the brochure and product image questionnaire that matches the country for which they have previously answered the Country Image Questionnaire. I.E. Korea group gets Korea brochure and product image questionnaire

1. Distribute the brochure of the car product. and allow about 5 minutes to read it carefully.
2. Distribute the questionnaire on product image
3. Allow about 5 minutes to answer. and then
4. Collect the questionnaires

Please apply the same procedures to each group.

By the time you read this we will have called you to discuss returning the questionnaires, but essentially, all answered questionnaires should be returned as soon as possible to:

Chan Woo Lee
Henley Management College
Greenlands, Henley-on-Thames
Oxfordshire. RG9 3AU
England, UK.

We really do appreciate your willingness to help us in this research effort. We want to publish a number of papers based on this research, and will include you as an author(s) on the one on your country, in a regional journal which we hope you will suggest. We will also put together a conference paper for submission at a top marketing conference (at a really good venue) and include all the individuals in various parts of the world who have helped us (UK, Australia, Hong Kong, South Africa, USA), as authors. That way we all get to have a beer together!

Yours faithfully,

Leyland Pitt	Dr. Pierre Berthon	Chan Woo Lee
Professor of Marketing	Tutor in Research Methodologies	Research Associate

TO : Chan Woo Lee
Henley Management College
Greenlands, Henley-on-Thames
Oxfordshire, RG9 3AU
England, UK.

A Summary of Questionnaires

	Date of Survey	Distributed Questionnaires	Collected Questionnaires
Germany		25	
Italy		25	
Korea		25	
Malaysia		25	
Total		100	

Administrator: _____

Survey Place : _____

_____

_____

_____

APPENDIX B

QUESTIONNAIRE ON COUNTRY IMAGE

Questionnaire on Country Image

We are interested in your views and feelings about Germany[i]. To assist us, we will ask you to place a **CIRCLE** on the scale from 1 to 7 to give us a number that best reflects your perception. There are no right or wrong answers. We are only interested in your perceptions. Don't take too much time – work quite quickly, and give us your first assessment on each item.

Answer the questions below by circling the appropriate point on the scale provided. A simple example is provided below:

By circling on the number 4 on the scale provided, it would mean that you felt that the country had neither a particularly poor, or a particularly good women's basketball team. If your feeling were stronger in either direction, you might use a 1, 2 or 3, or a 5, 6 or 7.

1 2 3 ④ 5 6 7

Poor women's basketball team — Good women's basketball team

Please ask if you have any problems.

1. In general, how would you rate your own knowledge of Germany?	1 2 3 4 5 6 7 Very little — Very much
2. In general, how much do you know about the politics of Germany?	1 2 3 4 5 6 7 Very little — Very much
3. In general, how much do you know about the economy of Germany?	1 2 3 4 5 6 7 Very little — Very much
4. In general, how much do you know about the technological advancement of Germany?	1 2 3 4 5 6 7 Very little — Very much
5. In general, how much do you know about the social culture of Germany?	1 2 3 4 5 6 7 Very little — Very much
6. What do you think about the stability of the political environment of Germany?	1 2 3 4 5 6 7 Unstable — Stable
7. Do you think that Germany has a military style government or civilian style government?	1 2 3 4 5 6 7 Military — Civilian
8. Do you feel that Germany has an autocratic political system or a democratic political system?	1 2 3 4 5 6 7 Autocratic system — Democratic system

(Continued Overleaf)

(Continued)

9. What do you think about the level of economic development of Germany?	1 2 3 4 5 6 7 Economically underdeveloped — Economically developed
10. To what extent do you think that Germany is an industrialised county?	1 2 3 4 5 6 7 Not very industrialised — Very industrialised
11. Do you think that Germany has a centrally planned economy or a free market economy?	1 2 3 4 5 6 7 Centrally planned economy — Free market economy
12. What do you think about the stability of the economic environment of Germany?	1 2 3 4 5 6 7 Unstable economic environment — Stable economic environment
13. What do you think about the general quality of products that come from Germany?	1 2 3 4 5 6 7 Very low quality — Very high quality
14. To what extent do you think Germany employs systems of mass production?	1 2 3 4 5 6 7 Very little extent — Very great extent
15. What do you think about the level of technological research in Germany?	1 2 3 4 5 6 7 Very low level — Very high level
16. What do you think about the level of labour costs in Germany?	1 2 3 4 5 6 7 Very low — Very high
17. What do you think about the literacy rate of Germans?	1 2 3 4 5 6 7 Very low — Very high
18. What do you think about the welfare system (e.g. health benefits, unemployment benefits, pensions and superannuation) that Germany provides its citizens?	1 2 3 4 5 6 7 Provides very little welfare — Provides a great deal of welfare
19. What do you think the standard of living in Germany is?	1 2 3 4 5 6 7 Very low — Very high

[i] The same questions are being made on Germany. Italy. Korea. and Malaysia.

APPENDIX C
BROCHURE OF CAR PRODUCT

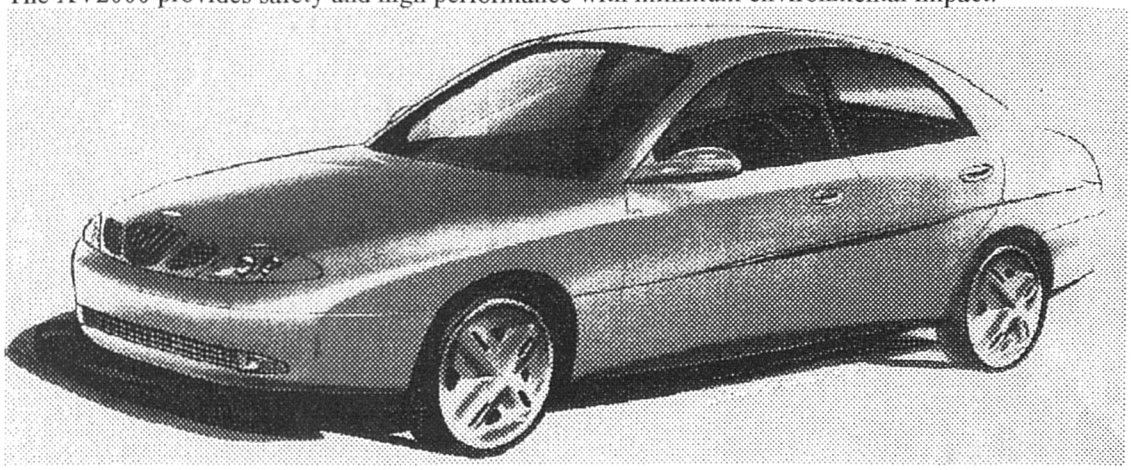
Please read this brochure carefully.

The XV2000 from Germany[i] : A car for the next millennium

Our brief was to develop a high performance, low environmental impact car utilising the most advanced technology. After 5 years of intensive research and development the XV2000 was born. The car brings together in perfect harmony: an ultra-efficient ceramic engine which utilises a Compressed Natural Gas (CNG) direct injection fuelling system. This power unit achieves near zero emission of environmentally harmful substances. Extensive use has been made of aluminium-alloy in the chassis, suspension and body, which has resulted in a 40% weight reduction over traditional car construction materials. Advanced driver control systems are integral to the design. These include: drive by wire, head-up display instrumentation, all wheel drive and steer, and satellite navigation.

The XV2000 is designed to maximise passenger safety and comfort. The bodyshell is many times more rigid than conventional designs, and the passenger compartment is encased by a patented energy dissipating system which has been shown to absorbs impact much more effectively than conventional protection bars and crumple zones. For the driver, the vehicle's advanced electronic control systems, chassis and suspension combine to enable the utilisation of the car's high performance across a wide range of weather and road conditions. The XV2000 is designed to minimise environmental impact. The engine is over 75% more efficient that conventional engines of similar power. The extensive use of alloys means that 90% of the car can be ecomomically recycled.

The XV2000 provides safety and high performance with minimum environmental impact.



The XV2000 - A Different Kind of Car

Key Features of the XV2000

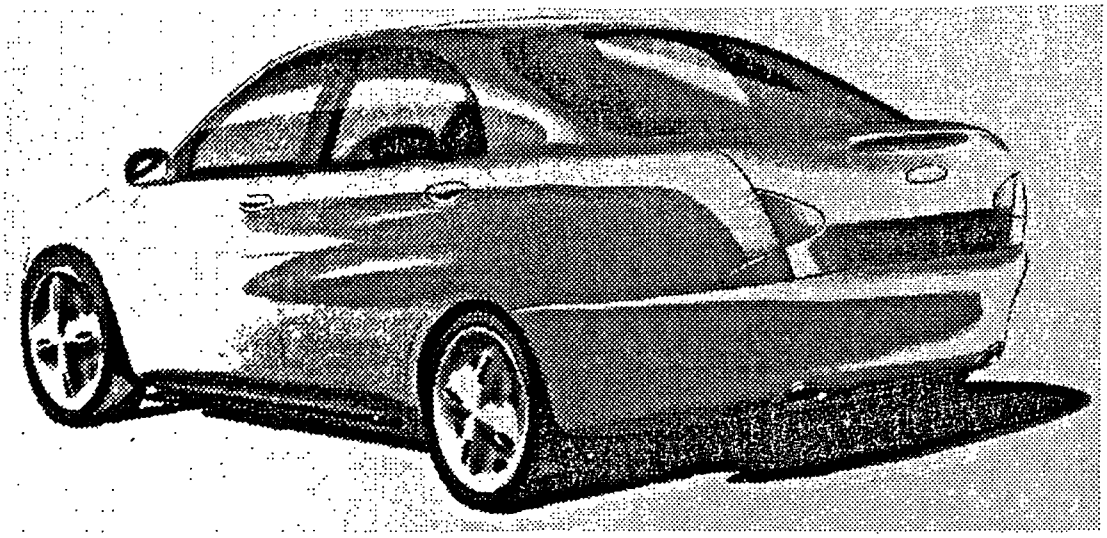
- Ultra-efficient ceramic engine
- Compressed Natural Gas (CNG), direct injection fuelling system
- Near zero emission technology
- Aluminium-alloy chassis and body
- Active ride suspension
- Advanced driver control systems: drive by wire, head-up display instrumentation, all wheel drive and steer, satellite navigation, fully electronic vehicle controlling system
- >90% component recyclability

(Continued Overleaf)

[i] Exactly, the same brochure of car product information from Germany, Italy, Korea, and Malaysia was giving to the subjects.

(Continued)

XV2000 is the Green car for the Next Millennium



Vehicle Specification			
Body Type:	• 4 Door Saloon - 5 Seater Capacity • Structural Aluminium Body Panels		
Engine	Type : CNG Engine 2.0 MPi	Max.Power (Ps/rpm): 210/7000	Max.Torque (Kgm/rpm): 25/5000
Transmission:	6 Speed semi-automatic - all wheel drive - multi electronic differentials		
Mechanical Specification:	Suspension:	• Full Independent Multilink Suspension (patented) • Active hydraulic System	
	Steering:	• Drive-by-wire • 4 Wheel Steering controlled by ECU (Electronic Control Unit)	
	Brakes:	• Front & Rear: Ventilated discs • ABS (Anti-Lock Brake System)	
Trim Specification	Front Seats:	• Fully reclining front seats • Adjustable for position and height • Adjustable lumber support for all derivatives	
	Rear Seats:	• Fold forward rear seat backrest to increase load carrying capacity • Rear centre arm-rest	
	Instrument Panel:	• Moulded instrument panel with integrated centre console • Head-up displays (HUDs)	
	Passanger compartment:	• Impact shell - energy dissipating	
Features	• Electronic Vehicle Controlling System • Satellite-based Automatic Navigation System using the Global Positioning System (GPS) • Embody Vehicle Security System • Air Conditioning System (non-CFC refrigerants) • LCD Automatic Tilting Glass		
Dimensions (mm) :	Exterior:	• Overall Length:	4467
		• Wheel base:	2570
		• Overall Width:	1700
		• Track - Front:	1466
		Rear:	1450
		• Overall Height:	1420
	Interior:	• Leg room - Front:	1063
		Rear:	882
		• Shoulder room- Front:	1370
		Rear:	882
		• Head room - Front:	973
		Rear:	966
Kerb Weights :	750 Kg		
Recycling	>90% recyclability		

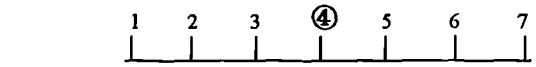
APPENDIX D

QUESTIONNAIRES ON PRODUCT IMAGE & GENERAL

Questionnaire on Product Image

Please look at <u>the brochure of a new car</u> from Germany[1], and then answer the questions below relating to the car. *Answer the questions simply by circling the appropriate point on the scale provided. A simple example is provided below:*

By circling on the number 4 on the scale provided, it would mean that you felt that this car from Germany had neither a particularly poor, or a particularly good level of after-sales service. If your feeling were stronger in either direction, you might use a 1, 2 or 3, or a 5, 6 or 7.



Please ask if you have any problems.

1. How would you rate your own level of interest in this German car?	1 2 3 4 5 6 7 Very low — Very high
2. What do you think about the overall quality of this German car would be like?	1 2 3 4 5 6 7 Very low quality — Very high quality
3. What is your feeling about the people who would own this German car?	1 2 3 4 5 6 7 Little pride of ownership — Great pride of ownership
4. What do you think about the social class of the people who would own this German car?	1 2 3 4 5 6 7 Lower class — Upper class
5. How easy is it to recognise the brand name of this German car?	1 2 3 4 5 6 7 Very difficult — Very easy
6. What do you think the level of technical advancement of this German car would be like?	1 2 3 4 5 6 7 Not well advanced — Well advanced
7. What do you think the standard of workmanship of this German car would be like?	1 2 3 4 5 6 7 Not very careful workmanship — Very careful workmanship
8. What do you think the level of performance of this German car would be like?	1 2 3 4 5 6 7 Very low — Very high
9. What do you think the technological design of this German car would be like?	1 2 3 4 5 6 7 Imitative — Innovative
10. What do you think about the styling of this German car?	1 2 3 4 5 6 7 Unfashionable — Fashionable

(Continued Overleaf)

(Continued)

11. What do you think the colours available for this German car would be like?	1 2 3 4 5 6 7 Very unappealing Very appealing
12. What do you think about the likely price of this German car?	1 2 3 4 5 6 7 Very inexpensive Very expensive
13. If you were intending to buy a new car, how likely would you be to buy this new car from Germany?	1 2 3 4 5 6 7 Very unlikely Very likely

General Questions

Finally, we have a few very general questions which you need to answer in similar ways to those your have previously helped us with.

1. How would you rate your own knowledge of cars?	1 2 3 4 5 6 7 Very low Very high
2. How often do you use a car?	1 2 3 4 5 6 7 Very seldom Very often
3. How often do you seek out information about cars in books, magazines, or from other people?	1 2 3 4 5 6 7 Very seldom Very often
4. Do you own a car? (Simply tick the appropriate box)	Yes ☐ No ☐
5. Are you male or female? (Simply tick the appropriate box)	Male ☐ Female ☐
6. Which of the categories includes your age? (Simply tick the appropriate box)	20 or younger ☐ 21-30 ☐ 31-40 ☐ 41-50 ☐ 51-60 ☐ Over 60 ☐

(End of Questions)

Thank you very much for your kind co-operation.

[i] The same questions are being made on the products from Germany. Italy, Korea and Malaysia.

APPENDIX E

ANOVA Results for Country Image

by COT by COO

VARIABLES	Total	Germany	Italy	Korea	Malaysia
Knowledge about the Country (C1)	2.66563 ◊	2.7000	2.8250	2.4500	2.6875
United Kingdom	2.6375	2.9000	3.1000	2.4000	2.1500
United States	3.2500	3.2000	2.9500	2.6500	4.2000
Hong Kong	2.2000	2.3000	2.1000	2.2500	2.1500
Australia	2.5750	2.4000	3.1500	2.5000	2.2500
Knowledge about Politics (C2)	2.12500 ◊	2.3250	2.0375	1.9875	2.1500
United Kingdom	2.0500	2.2500	2.5500	1.8000	1.6000
United States	2.5125	2.9500	2.0000	2.0000	3.1000
Hong Kong	1.7625	1.7500	1.5000	2.0000	1.8000
Australia	2.1750	2.3500	2.1000	2.1500	2.1000
Knowledge about Economy (C3)	2.40313	2.6000*	2.3625	2.1375	2.5125
United Kingdom	2.3875	2.4500	2.8500	2.3500	1.9000
United States	2.8750	3.2500	2.3500	2.0000	3.9000
Hong Kong	2.0000	2.0500	1.9000	2.0000	2.0500
Australia	2.3500	2.6500	2.3500	2.2000	2.2000
Knowledge about Tech. Advance (C4)	2.56875	2.9750**	2.2000	2.5250	2.5750
United Kingdom	2.6625	3.1500	2.5000	2.6500	2.3500
United States	2.9375	3.3500	2.0500	2.7500	3.6000
Hong Kong	2.1250	2.4000	2.0000	2.1000	2.0000
Australia	2.5500	3.0000	2.2500	2.6000	2.3500
Knowledge of Socio-Culture (C5)	2.84688	2.7375	3.1125*	2.5875	2.9500
United Kingdom	2.8125	3.0000	3.6500	2.1500	2.4500
United States	3.2125	3.2500	2.9500	2.6500	4.0000
Hong Kong	2.4125	2.2000	2.2000	2.7000	2.5500
Australia	2.9500	2.5000	3.6500	2.8500	2.8000
Political Stability (C6)	3.36563	3.7000**	3.1500	3.1375	3.4750
United Kingdom	3.1625	4.3500	2.4500	2.9500	2.9000
United States	3.9625	4.2500	3.8000	3.7500	4.0500
Hong Kong	3.1250	2.8500	3.4500	2.9500	3.2500
Australia	3.2125	3.3500	2.9000	2.9000	3.7000
Government Style (C7)	3.93438	4.1000**	4.6250***	3.5000	3.5125
United Kingdom	4.0750	4.6000	5.0000	3.4000	3.3000
United States	4.1000	4.6500	4.6500	3.1500	3.9500
Hong Kong	3.5875	3.1500	4.4000	3.3500	3.4500
Australia	3.9750	4.0000	4.4500	4.1000	3.3500

Political System (C8)	3.93438	4.3250**	4.4750**	3.4625	3.4750
United Kingdom	4.2000	5.2000	4.8500	3.2000	3.5500
United States	3.8750	4.2000	4.3000	3.2000	3.8000
Hong Kong	3.6000	3.4000	4.3500	3.2000	3.4500
Australia	4.0625	4.5000	4.4000	4.2500	3.1000
Economic Development (C9)	4.78750	5.2875***	4.7625	4.7250	4.3750
United Kingdom	4.9875	6.1500	5.1000	4.2500	4.4500
United States	5.1000	5.6500	4.8500	4.9000	5.0000
Hong Kong	4.3125	4.3000	4.5500	4.7500	3.6500
Australia	4.7500	5.0500	4.5500	5.0000	4.4000
Industralisation (C10)	4.71250	5.4125**	4.5125	4.7875	4.1375
United Kingdom	4.9375	6.2000	5.2000	4.3500	4.0000
United States	4.9750	5.8000	4.6500	5.0000	4.4500
Hong Kong	4.2125	4.5500	3.8000	4.6000	3.9000
Australia	4.7250	5.1000	4.4000	5.2000	4.2000
Market System (C11)	4.27187	4.3500*	4.8000***	3.9125	4.0250
United Kingdom	4.1875	4.3500	5.0000	3.7500	3.6500
United States	4.4750	4.6500	4.7500	3.8000	4.7000
Hong Kong	4.1875	4.1000	4.7500	3.9000	4.0000
Australia	4.2375	4.3000	4.7000	4.2000	3.7500
Economic Environment (C12)	4.48750	4.7250*	4.4500	4.4125	4.3625
United Kingdom	4.5500	5.3000	4.4500	4.5000	3.9500
United States	4.8625	5.2000	4.6000	4.4500	5.2000
Hong Kong	4.3000	4.2000	4.6000	4.3500	4.0500
Australia	4.2375	4.2000	4.1500	4.3500	4.2500
Product Quality (C13)	4.88750	5.6125**	5.6250**	4.2375	4.0750
United Kingdom	4.7125	5.9000	5.2000	4.0000	3.7500
United States	5.2375	5.9000	5.9000	4.3500	4.8000
Hong Kong	4.7250	5.1000	5.4500	4.4500	3.9000
Australia	4.8750	5.5500	5.9500	4.1500	3.8500
Production System (C14)	4.61250	4.7625*	4.1500	4.7625*	4.7750*
United Kingdom	5.0375	5.1500	4.8000	5.1500	5.0500
United States	4.6375	5.1000	3.8500	4.7000	4.9000
Hong Kong	4.2250	4.3000	3.9000	4.2000	4.5000
Australia	4.5500	4.5000	4.0500	5.0000	4.6500
Technological Research (C15)	4.43125	5.2125***	4.2500*	4.3875*	3.8750
United Kingdom	4.6750	6.0500	4.5000	4.3500	3.8000
United States	4.5250	5.3500	3.9500	4.3500	4.4500
Hong Kong	4.0500	4.3500	4.1500	4.3000	3.4000
Australia	4.4750	5.1000	4.4000	4.5500	3.8500

Labour Costs (C16)		3.62813	4.4875**	4.2250**	3.1750*	2.6250
	United Kingdom	3.3875	4.7500	3.9500	2.5000	2.3500
	United States	3.9000	4.7500	4.6000	3.1500	3.1000
	Hong Kong	3.6375	4.0500	4.3500	3.7500	2.4000
	Australia	3.5875	4.4000	4.0000	3.3000	2.6500
Literacy Rate (C17)		4.34375	5.0000**	4.7000**	4.1500*	3.5250
	United Kingdom	4.5625	5.9500	5.6500	3.7500	2.9000
	United States	4.6500	5.2000	4.4000	4.6000	4.4000
	Hong Kong	4.0000	4.0500	4.3500	4.1500	3.4500
	Australia	4.1625	4.8000	4.4000	4.1000	3.3500
Welfare System (C18)		3.90313	4.5875***	3.9625*	3.7375*	3.3250
	United Kingdom	3.7500	4.9500	4.2000	3.2500	2.6000
	United States	4.1625	4.9500	3.8500	3.8000	4.0500
	Hong Kong	4.0875	4.4000	4.4500	4.0000	3.5000
	Australia	3.6125	4.0500	3.3500	3.9000	3.1500
Living Stardard (C19)		4.36250	5.0375***	4.6625**	4.1625*	3.5875
	United Kingdom	4.1375	5.7000	4.5500	3.5000	2.8000
	United States	4.5625	5.2000	4.4500	4.2000	4.4000
	Hong Kong	4.3875	4.4500	4.9500	4.6500	3.5000
	Australia	4.3625	4.8000	4.7000	4.3000	3.6500

Notes: (*) indicates significant differences between groups of COO with LSD test with significance level .05.
(◊) indicates that no two groups are significantly different at the .05 level.

APPENDIX F

ANOVA Result for Product Image and Purchase Willingness by COT by COO

VARIABLES	Total	Germany	Italy	Korea	Malaysia
Interest (P1)	4.49062 ◊	4.5750	4.4125	4.4750	4.5000
United Kingdom	4.4250	4.3000	4.7000	4.6500	4.0500
United States	4.4500	5.0500	4.1500	4.4500	4.1500
Hong Kong	4.3500	4.1000	4.1000	4.4000	4.8000
Australia	4.7375	4.8500	4.7000	4.4000	5.0000
Overall Quality (P2)	5.16875	5.5375**	5.3875**	5.0375	4.7125
United Kingdom	5.3375	6.0000	5.5000	5.3500	4.5000
United States	4.9125	5.5000	4.9000	4.8500	4.4000
Hong Kong	5.1250	5.1000	5.4500	5.0000	4.9500
Australia	5.3000	5.5500	5.7000	4.9500	5.0000
Pride of Ownership (P3)	5.17188	5.5125**	5.3750**	4.8500	4.9500
United Kingdom	5.4375	5.9000	5.8000	5.0500	5.0000
United States	5.1375	5.8500	4.8500	4.9000	4.9500
Hong Kong	4.5875	4.8000	5.0000	4.4000	4.1500
Australia	5.5250	5.5000	5.8500	5.0500	5.7000
Social Class (P4)	5.18125	5.4000**	5.5375**	4.7875	5.0000
United Kingdom	5.3125	5.5500	5.6000	4.8500	5.2500
United States	5.1500	5.5000	5.3000	5.0000	4.8000
Hong Kong	4.7750	4.9500	5.3500	4.4500	4.3500
Australia	5.4875	5.6000	5.9000	5.9000	4.8500
Brand Recognition (P5)	3.69688	3.9000*	3.7375*	3.8875*	3.2625
United Kingdom	3.6750	3.4500	4.0000	3.6500	3.6000
United States	3.8125	4.5000	3.6500	3.7500	3.3500
Hong Kong	3.8875	4.0500	4.0000	4.2500	3.2500
Australia	3.4125	3.6000	3.3000	3.9000	2.8500
Tech. Advancement (P6)	5.55625	5.8500**	5.6125	5.4375	5.3250
United Kingdom	5.7000	6.1000	5.6500	5.8000	5.2500
United States	5.4750	6.0000	5.3000	5.5500	5.0500
Hong Kong	5.2750	5.3000	5.3500	5.2000	5.2500
Australia	5.7750	6.0000	6.1500	5.2000	5.7500
Workmanship (P7)	5.25000	5.6125**	5.2500*	5.1125	4.9250
United Kingdom	5.5250	6.1000	5.4500	5.5500	5.0000
United States	5.1500	5.5500	5.0500	5.3000	4.7000
Hong Kong	4.9250	5.0000	4.9500	5.0000	4.7500
Australia	5.400	5.8000	5.9500	4.6000	5.2500
Performance (P8)	5.21875	5.4125**	5.4375**	5.0500	4.9750
United Kingdom	5.4750	5.7000	5.7500	5.4000	5.0500
United States	5.0750	5.5500	4.9500	5.2000	4.6000
Hong Kong	4.9875	4.9500	5.2500	4.9500	4.8000
Australia	5.3375	5.4500	5.8000	4.6500	5.4500

Technological Design (P9)	5.42500	5.6250**	5.6500**	5.2750	5.1500
United Kingdom	5.5625	5.9000	5.7000	5.5500	5.1000
United States	5.3750	5.9000	5.4500	5.4000	4.7500
Hong Kong	5.1500	4.9000	5.5500	4.9000	5.2500
Australia	5.6125	5.8000	5.9000	5.2500	5.5000
Styling (P10)	5.17812 ◊	5.1875	5.2875	5.1625	5.0750
United Kingdom	5.4250	5.3000	5.7500	5.5500	5.1000
United States	4.8500	5.2500	4.6500	4.7500	4.7500
Hong Kong	4.8375	4.7000	5.2500	4.7000	4.7000
Australia	5.6000	5.5000	5.5000	5.6500	5.7500
Colour (P11)	4.97813	5.0250*	5.2500*	5.0250*	4.6125
United Kingdom	5.1000	5.3500	5.4000	5.3000	4.3500
United States	5.2000	5.5000	5.3000	5.3000	4.7000
Hong Kong	4.4500	4.2000	4.7500	4.6500	4.2500
Australia	5.1625	5.0500	5.5500	4.9000	5.1500
Price (P12)	5.10000	5.3750**	5.6000**	4.7875	4.6575
United Kingdom	5.3375	5.7500	5.7500	5.2500	4.6000
United States	5.0000	5.3000	5.1500	4.9000	4.6500
Hong Kong	4.6375	4.8000	5.4500	4.3000	4.0000
Australia	5.4250	5.6500	6.0500	4.7000	5.3000
Purchase Willingness (P13)	3.47813 ◊	3.4750	3.6125	3.5250	3.3000
United Kingdom	3.5875	3.3500	4.1500	3.7000	3.1500
United States	3.5750	3.4500	3.0500	3.7000	4.1000
Hong Kong	3.3750	3.5000	3.7500	3.2000	3.0500
Australia	3.3750	3.6000	3.5000	3.5000	2.9000

Notes: (*) indicates significant differences between groups of COO with LSD test with significance level .05.
(◊) indicates that no two groups are significantly different at the .05 level.

APPENDIX G

Summarised Statistics of Covariance for Country Image

VARIABLE		F-VALUE	SIG of F
I. Multivariate Tests of Significance (S = 4, M = 7, N = 140)			
Pillais	.24476	.97769	.534
Hotellings	.26571	.98070	.527
Wilks	.77498	.97927	.530
Roys	.09909		
II. Univariate F-Tests with (4, 300) D.F.			
Knowledge of the Country (C1)		3.32277	.011
Knowledge of Politics (C2)		3.19318	.014
Knowledge of Economy (C3)		3.96077	.004
Knowledge of Tech. Advance (C4)		4.48036	.002
Political System (C8)		2.54595	.040

III. Regression Analysis for Within+Residual Error Term at .9500 Confidence Intervals

	Covariate	B	Beta	Std Err	t-Value	Sig of t
Knowledge of the Country (C1)	Knowledge (G1)	.17139	.21608	.069	2.483	.014
	Usage (G2)	.12424	.21636	.060	2.060	.040
Knowledge of Politics (C2)	Knowledge (G1)	.16502	.21879	.068	2.442	.015
Knowledge of Economy (C3)	Knowledge (G1)	.19187	.22869	.074	.2598	.010
	Ownership (G4)	.63814	.22252	.263	2.425	.016
Knowledge of Tech. Advance (C4)	Knowledge (G1)	.19982	.23368	.076	2.621	.009
Political System (C8)	Usage (G2)	.17868	.27286	.069	2.599	.010
Product Quality (C13)	Knowledge (G1)	.13562	.17765	.058	2.355	.019

APPENDIX H

Summarised Statistics of Covariance for Product Image

VARIABLE		F-VALUE	SIG of F
I. Multivariate Tests of Significance (S = 4, M = 4, N = 143)			
Pillais	.37703	2.32948	.000
Hotellings	.43672	2.40614	.000
Wilks	.66691	2.36969	.000
Roys	.18773		
II. Univariate F-Tests with (4, 300) D.F.			
Interest (P1)		6.35830	.000
Overall Quality (P2)		4.98607	.001
Pride of Ownership (P3)		5.05154	.001
Brand Recognition (P5)		3.81311	.005
Technical Advancement (P6)		3.57568	.007
Performance (P8)		3.81603	.005
Technological Design (P9)		3.07866	.017
Colour (P11)		3.90625	.004
Purchase Willingness (P13)		3.61758	.007

III. Regression Analysis for Within+Residual Error Term at .9500 Confidence Intervals

	Covariate	B	Beta	Std Err	t-Value	Sig of t
Interest (P1)	Knowledge (G1)	.35203	.38120	.084	4.182	.000
Overall Quality (P2)	Knowledge (G1)	.20397	.31045	.057	.3.563	.000
Pride of Ownership (P3)	Knowledge (G1)	.18086	.25076	.061	2.945	.003
Brand Recognition (P5)	Knowledge (G1)	.24050	.27622	.079	3.031	.003
Technical Advancement (P6)	Knowledge (G1)	.17483	.28592	.055	3.207	.001
Performance (P8)	Knowledge (G1)	.18050	.30053	.053	3.409	.001
Technological Design (P9)	Knowledge (G1)	.16694	.26088	.057	2.908	.004
Styling (P10)	Knowledge (G1)	.13420	.18104	.067	1.995	.047
Colour (P11)	Knowledge (G1)	.12099	.18602	.057	2.140	.033
	Usage (G2)	.16252	.34515	.049	3.290	.001
Purchase Willingness (P13)	Knowledge (G1)	.31618	.34457	.085	3.728	.000