

THE EFFECTS OF NATIONAL STEREOTYPES ON COUNTRY  
OF ORIGIN–BASED PRODUCT EVALUATIONS

by

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A dissertation submitted to the Graduate Faculty in Business in partial fulfillment of the  
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## Abstract

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by

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The study of country of origin effects on consumer evaluation of products is an important area of research in consumer behavior and international marketing. This dissertation studies the relation between country of origin-based consumer evaluations of the hedonic and utilitarian dimensions of product attitudes and the two dimensions of national stereotype contents – perceived warmth and perceived competence.

The first contribution of this dissertation lies in the theory-driven adoption of a partitioned national stereotypes construct in country of origin research. The second contribution extends important concepts and theories from consumer behavior - such as the utilitarian and hedonic dimensions of product attitude - to a novel context, that of national stereotypes. Specifically, the conceptual model proposes that the perceived competence dimension interacts with the utilitarian dimension, while the perceived warmth dimension interacts with the hedonic dimension, to produce a stronger effect on product evaluation. Consumer familiarity with a country's products and involvement are hypothesized to be moderator variables, while product familiarity is predicted to be a covariate.

A between-subjects experimental study was used to test the conceptual model.

The empirical results support the proposed interaction between perceived competence and utilitarian attitudes, but not between perceived warmth and hedonic attitudes. Furthermore, familiarity with a country's products was observed to have an independent, rather than moderating, effect on product evaluation. The predicted moderating role of involvement was not empirically observed. Finally, product familiarity was found to be a significant covariate. An array of theoretical and managerial implications stemming from the conceptual model and empirical findings are discussed in addition to limitations and directions for future research.

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## TABLE OF CONTENTS

### CHAPTERS

|          |                                                                           |           |
|----------|---------------------------------------------------------------------------|-----------|
| <b>1</b> | <b>Introduction</b>                                                       | <b>1</b>  |
|          | Construct Definition                                                      | 5         |
|          | Dissertation Chapter Organization                                         | 8         |
| <b>2</b> | <b>Literature Review</b>                                                  | <b>10</b> |
|          | Country of Origin Effects (Single-Cue Studies)                            | 10        |
|          | Country of Origin Effects (Multi-Cue Studies)                             | 12        |
|          | Country of Origin Effects (Hybrid Products)                               | 17        |
|          | Effect of Product Type                                                    | 22        |
|          | Effect of Country-Product Familiarity                                     | 24        |
|          | Longitudinal Effect of COO                                                | 25        |
|          | Measurement of Country of Origin Effects                                  | 28        |
|          | Effect of National Stereotypes on Country of Origin                       | 30        |
| <b>3</b> | <b>Conceptual Framework</b>                                               | <b>33</b> |
|          | Social Categorization Theory                                              | 34        |
|          | Social Identity Theory                                                    | 35        |
|          | National Stereotype Contents                                              | 36        |
|          | The Stereotype Content Model: The Competence vs. Warmth Dimensions        | 39        |
| <b>4</b> | <b>Research Hypotheses</b>                                                | <b>42</b> |
|          | The National Stereotype Dimensionality/Product Dimensionality Interaction | 42        |
|          | Country-Product Familiarity                                               | 46        |
|          | Involvement                                                               | 48        |
|          | Product Familiarity as a Covariate Variable                               | 49        |
| <b>5</b> | <b>Methodology</b>                                                        | <b>51</b> |
|          | Subjects and Study Design                                                 | 51        |
|          | Procedure                                                                 | 52        |
|          | Pretests                                                                  | 53        |
|          | Stimuli                                                                   | 55        |
|          | Independent Variables Manipulation                                        | 56        |
|          | Dependent Variable Measures                                               | 58        |
|          | Moderator Variable Measures                                               | 60        |
|          | Independent Variable Manipulation Measures                                | 61        |
|          | Covariate Variable Measures                                               | 64        |
| <b>6</b> | <b>Results</b>                                                            | <b>66</b> |
|          | Manipulation Checks                                                       | 66        |
|          | Effects of Covariate Variables                                            | 68        |
|          | Effects of National Stereotype Dimensionality and Product Dimensionality  | 69        |
|          | Effects of Moderator Variables                                            | 72        |
|          | Tests of Assumptions of ANOVA                                             | 74        |
| <b>7</b> | <b>General Discussion</b>                                                 | <b>76</b> |
|          | Discussion of Empirical Findings                                          | 76        |
|          | Theoretical Implications                                                  | 82        |
|          | Managerial Implications                                                   | 83        |
|          | Limitations                                                               | 86        |
|          | Future Research                                                           | 87        |

**LIST OF TABLES**

|           |                                                                                         |            |
|-----------|-----------------------------------------------------------------------------------------|------------|
| <b>1</b>  | <b>Literature Review of Country of Origin Effects</b>                                   | <b>89</b>  |
| <b>2</b>  | <b>Rotated Component Matrix of National Stereotype Dimension</b>                        | <b>90</b>  |
| <b>3</b>  | <b>Rotated Component Matrix of Product Dimensionality</b>                               | <b>91</b>  |
| <b>4</b>  | <b>Descriptive Statistics of National Stereotype Dimensionality Manipulation Checks</b> | <b>92</b>  |
| <b>5</b>  | <b>ANOVA of National Stereotype Dimensionality Manipulation Checks</b>                  | <b>93</b>  |
| <b>6</b>  | <b>Descriptive Statistics of Product Dimensionality Manipulation Checks</b>             | <b>94</b>  |
| <b>7</b>  | <b>ANOVA of Product Dimensionality Manipulation Checks</b>                              | <b>95</b>  |
| <b>8</b>  | <b>Between-Subjects Factors</b>                                                         | <b>96</b>  |
| <b>9</b>  | <b>Descriptive Statistics of Between-Subjects Effects</b>                               | <b>97</b>  |
| <b>10</b> | <b>Tests of Between-Subjects Effects (ANCOVA Model)</b>                                 | <b>98</b>  |
| <b>11</b> | <b>Tests of Between-Subjects Effects (ANOVA Model)</b>                                  | <b>99</b>  |
| <b>12</b> | <b>Parameter Estimates (Tests of Simple Effects)</b>                                    | <b>100</b> |
| <b>13</b> | <b>Tests of Between-Subjects Effects (Final Model)</b>                                  | <b>101</b> |

**LIST OF FIGURES**

|          |                                                                                                          |            |
|----------|----------------------------------------------------------------------------------------------------------|------------|
| <b>1</b> | <b>Country of Origin (COO) Effects</b>                                                                   | <b>102</b> |
| <b>2</b> | <b>Proposed Theoretical Framework &amp; Hypotheses</b>                                                   | <b>103</b> |
| <b>3</b> | <b>Profile Plot of Nat. Stereotype Dim. with Product Dim. Interaction</b>                                | <b>104</b> |
| <b>4</b> | <b>Profile Plot of Effects of the Two Levels of “NCountry-Product Familiarity” on Product Evaluation</b> | <b>105</b> |

**LIST OF APPENDICES**

|          |                                            |            |
|----------|--------------------------------------------|------------|
| <b>1</b> | <b>Study Questionnaire</b>                 | <b>106</b> |
| <b>2</b> | <b>Study Treatments (Color Ad Stimuli)</b> | <b>111</b> |

|                     |            |
|---------------------|------------|
| <b>BIBLIOGRAPHY</b> | <b>113</b> |
|---------------------|------------|

## **CHAPTER 1: INTRODUCTION**

“In this ever changing world, Singapore Girl, you’re a great way to fly,” proclaims a recent advertising campaign for Singapore Airlines, reintroducing the warm and friendly, if somewhat controversial, “Singapore Girl” icon originally invented in 1974, to a contemporary audience. Even in today’s global environment, the vast majority of the world’s airlines continue to proudly assert their country of origin, carrying brand names, symbols and advertising slogans derived from their national affiliation and its associated stereotype contents.

Country of origin information, often communicated in the form of a “made in...” label, activates a rich associative network of stereotypes about the origin nation, its culture and its people’s perceived traits. In essence, stereotypes can be defined to represent an individual’s cognitive associations and expectations about a national group (Fiske 1998). A product’s country of origin cue figuratively expresses its “genetic code,” adding meaning to its identity and allowing the potential for differentiation from other competing products. In our vastly commoditized society, consumers often build and express their own personal selves through their product choices, and country of origin has been shown to be one of the evaluation factors they consider when forming their preferences.

This dissertation proposes an original conceptualization regarding the relationship between national stereotypes about a country’s culture on the one hand and country of origin-based consumer evaluations of products on the other. The major contribution of this dissertation lies in the decomposition of the national stereotype construct, which up to now has been viewed in the country of origin (COO) literature as a unidimensional construct,

into the two theoretically-driven dimensions of perceived warmth and perceived competence as adopted from the Stereotype Content Model (SCM) by Fiske et al. (1999 and 2002). A number of research hypotheses with important theoretical and practical implications are advanced.

Hundreds of studies have established the effect of COO cues on product evaluation, however, we still know very little on how national stereotypes and their contents influence such effects. Although a small number of consumer studies [e.g. Heslop and Papadopoulos (1993)] have looked at the effect of national stereotypes on COO, the impact of national stereotypes as an antecedent of COO effects on product evaluation has not been previously introduced or measured as a distinct, bidimensional construct in a consumer research context.

A recent theoretical advance (the Stereotypes Contents Model or SCM, introduced by Fiske et al. 2002) posits the notion that national stereotypes are in fact multidimensional, with two distinct components - perceived competence and perceived warmth. This dissertation proposes an original conceptualization regarding the relationship between evaluations of hedonic and utilitarian products on the one hand and national stereotype dimensions on the other.

Examining the dimensionality of national stereotypes would allow us to better understand the COO effect on product evaluation. Similarly to brands, consumers hold perceptual imagery of nations, their culture and associated products. According to the SCM's postulations, if a nation was thought of as a person, then it would be fundamentally attributed as being either warm or competent, but rarely both. The conceptual model advanced in this dissertation posits that utilitarian products originating in competent

nations will be evaluated more highly than their hedonic products, whereas hedonic products from warm nations will be judged more favorably than utilitarian products from such stereotyped nations.

This dissertation reviews the fundamental, but little understood relationship, between country of origin effects and national stereotypes, drawing on relevant research in the social sciences.

The main research contribution of this dissertation is the experimental testing of the interaction between the contents of national stereotypes, decomposed in their two dimensions of perceived competence and perceived warmth (Fiske et al. 1999 and 2002), and two theoretically important dimensions of products - hedonic and utilitarian (Voss et al. 2003). According to the authors, the hedonic dimension is resultant from the sensory experience of using products, whereas the utilitarian dimension is ensuing from functions performed by products. This is the first time such a conceptualization is theoretically developed and subsequently tested in the country of origin and consumer behavior literatures. A ground-breaking study by Leclerc et al. (1994) found that “perceived Frenchness” impacts the “perceived hedonism” of products and provided the inspiration for this dissertation to explore the interaction of national stereotypes with product dimensionality at a higher level of abstraction than their “Frenchness” factor.

Importantly, the dissertation’s findings hold significant managerial implications for corporations and national governments alike, especially in the emergent field of the nation as a brand and the overall marketing strategies of countries. This dissertation’s proposed framework suggests that nations, similar to brands, should deliberately project an image of competence or warmth respectively, based on the type of product and consumer market

characteristics that they target.

As nations increasingly compete with each other for global markets, they must establish unique selling propositions that effectively differentiate them and their products from other countries. When undertaking such “nation-marketing” efforts, they may wish to strategically bolster their relatively weaker stereotype dimension. Singapore Airlines’s utilization of the Singapore girl icon is an example of such an advertising appeal to compensate for the lack of perceived warmth attributed to the nation of Singapore that is often stereotyped as being competent to a fault. In contrast, a recent business magazine advertisement promoting the decidedly utilitarian market of technology investments presented the slogan “Singapore: Where nothing is impossible,” clearly projecting an image of competence for the nation.

Similarly, Taiwan uses the warm slogan “Touch your heart in Taiwan” when advertising a hedonic industry such as tourism and conversely, the competent motto “Taiwan, your partner for innovalue” to export utilitarian products in the information technology industry.

The study of national stereotypes and their contents has generated considerable attention, particularly in the area of social cognition, while a broad array of research in the areas of consumer behavior and international marketing has investigated the effects of country of origin on product evaluation. This dissertation attempts to merge these divergent research streams, by proposing and experimentally testing a comprehensive conceptual framework that delineates the effect of the contents of national stereotypes on country of origin-based product evaluation.

## **Construct Definition**

There are various definitions in the literature of what exactly constitutes a country of origin effect. According to Wang and Lamb (1983), country of origin effects are “intangible barriers to entering new markets in the form of consumer biases toward imported products.” Gurhan-Canli and Maheswaran (2000) define country of origin effects as “the extent to which the place of manufacture influences product evaluations.” Many other researchers (e.g. Han and Terpstra 1988) define the product’s country of origin as the country of manufacture or assembly. Others (e.g. Nagashima 1970) simply use the term “made in.” Johansson et al. (1985) defined country of origin as the country where the corporate headquarters of the company marketing the product or brand is located.

However, Papadopoulos (1993) pointed out that COO cues might be available to consumers in a broader set of direct or indirect associations than simply through the “made in” label. These include the direct inserting of the national origin in the brand name (e.g. Alitalia), symbolizing it through an advertising icon (e.g. “Singapore Girl”), indirectly signifying it through the semiotic meaning associated with the brand (e.g. Giorgio Armani is an “Italian” name) or its visual logo (e.g. Tommy Hilfiger’s logo deliberately incorporates the red, white and blue colors of the U.S. flag) or referring to it in advertising claims (e.g. “Beck’s: The number one German beer”).

Discerning a product’s COO is becoming even harder in the contemporary marketplace where, because of global sourcing and manufacturing, many products have a dual or multinational origin. For example, a Toshiba television may be assembled in Mexico, but include Japanese, Mexican, or even American parts. At the same time, the Toshiba brand name is associated with Japanese origins. Increasingly, globalization is

creating a proliferation of such hybrid products of binational or multinational origin.

In this era of multinational or hybrid products, such as the iPod Shuffle for example, whose packaging claim is “designed by Apple in California and made in China,” the country of design may be a more relevant cue than the country of manufacturing one. Some global firms have in fact chosen a deliberately hybrid positioning strategy. L’Oreal has made a conscious effort to diversify the cultural origins of its brands to include, “New York street smarts or French beauty”. Recognizing that two beauty cultures are prominent, French and American, L’Oreal thrives by embracing both (Edmondson 1999). Recently, McDonald’s utilized the advertising slogan “Born in the U.S., made in France” in response to being the target of anti-American protests in that country (Tagliabue 1999). On the other hand, British Airways has recently decided to drop its “globalness” campaign that involved painting its fleet with multiple schemes designed by artists representing the diversity of countries on its route system, to return to its traditional “Britannia” national origin appeal.

In some cases firms may strategically select to communicate an origin country entirely different of their own, in order to overcome the negative associations of their home country or to appropriate the positive images of another nation. Wine and Cosmetics exporters from around the world often aim to project a (false) sense of Frenchness, typically by means of French sounding brand names. Nokia, the Finnish telecommunications firm is often thought to be Japanese because the perceived associations of its name (whether deliberate or not). Recently, China’s leading appliance maker has employed a Germanic brand name (Haier) for its export products. Finally, there is the case of “Sony Boy,” Sony Corporation’s early mascot. No longer in use, “Sony Boy” was a happy Caucasian-looking kid with big ears (signaling the transistor radios that

propelled Sony into the world market) and brown hair. At a time when (the 1950's and early 1960's) Japan was perceived as an inferior quality producer, "Sony Boy" may have been a manner of semiotically communicating that "our goods are good enough for American consumers," by appropriating a stereotypically American-looking child as the brand mascot (Dotz and Morton 1996).

Likewise to brand attitudes, country of origin effects rely on socially constructed and shared beliefs about a nation's attributes and traits that can aid consumers in their attempt to evaluate a wide range of goods and services offered for consumption.

As the volume and diversity of international trade grows, an ever-increasing number of consumer decisions involve products of foreign origin. Formal barriers to trade are being curtailed by multinational public policy initiatives (e.g. through the World Trade Organization) improved transportation and communication technology, and the globalization strategies of multinational corporations. At the same time, the potential influence of intangible barriers in the form of national stereotypes and consumer ethnocentrism acquires added importance. On the other hand, globalization leads to greater consumer exposure of information about nations, their culture and products.

Given that country of origin effects are purely based on consumer perceptions about a product's origin, this expansive conceptualization of the country of origin effect offered by Papadopoulos (1993) seems most apt: "One should consider the country of origin effect as the result of the *perceived national identification or affiliation* of a product by a consumer, regardless of any explicit or implicit and real or false claims inherent in the product or its associated promotion. The country of origin of a good or service is simply, whatever a consumer perceives it to be." Building on this definition, it is broadly meant

that the COO effect is based on the perceived differences in attributes and traits among nations and their impact on consumer evaluations of products perceptually associated with that nation. A thorough examination of the effect of national stereotypes and their contents as an important antecedent of the COO effect marks a key contribution of this dissertation.

### **Dissertation Chapter Organization**

The next chapters of this dissertation are organized as follows:

In chapter 2, a literature review of prior research on country of origin effects is presented. This comprehensive review includes the early single-cue studies, followed by the multi-cue studies as well as studies on hybrid products of multiple COO cues. The moderating effects of product type and country-product familiarity are reviewed next, followed by longitudinal studies that trace how COO effects could change over time. The literature review concludes with what we already know in respect to the effect of national stereotypes on COO.

Chapter 3 develops the dissertation's conceptual model by first reviewing the major tenants provided by social categorization theory and social identity theory. The chapter next introduces the Stereotype Contents Model (SCM), integrating its postulations with past findings in the COO area and arguing for its applicability in this research.

Using the SCM as a foundation, Chapter 4 advances a number of research hypotheses that include implications for the perceived competence and perceived warmth dimensions of national stereotypes for COO-based evaluations of hedonic and utilitarian products, as well as a focus on the role of consumer familiarity with a country's products and involvement as moderator variables. Specifically, it is hypothesized that the simple

effect of the perceived competence dimension on product evaluation is higher for utilitarian products, while the simple effect of the perceived warmth dimension on product evaluation is higher for hedonic products.

Chapter 5 reviews the methodology employed to test for the proposed hypotheses, including sections on the subjects and study design, research procedure, pretests, stimuli, independent variable manipulation and the independent, dependent, moderator and covariate variable measures.

Chapter 6 presents the empirical results of the between-subjects experimental design study, including manipulation checks, hypothesized effects and tests of the assumptions of ANOVA.

Finally, Chapter 7 offers a detailed discussion and explanation of the empirical findings, their theoretical and managerial implications, concluding with sections on limitations and directions for future research.

## **CHAPTER 2: LITERATURE REVIEW**

The schematic shown in Figure 1 summarizes what we already know about country of origin effects from the information-processing paradigm that prevails in the literature hereby reviewed in Chapter 2. Essentially, when presented to consumers as an information cue, country of origin has been shown to influence product evaluations directly, and purchase intentions indirectly. As shown in Figure 1 and summarized in Table 1, product type and country-product familiarity have been shown to moderate the effect of the country of origin cue on product evaluation.

This chapter commences with a literature review of the early single-cue studies, followed by the later studies that tested country of origin as one of multiple product-related information cues. The next section reviews studies that examine the COO effect on hybrid products of multiple origins. The moderating effects of product type and consumer familiarity with a country's products are reviewed next, followed by longitudinal studies that project the conditions under which COO effects might be modified over time. The literature review concludes with a review of the few studies that have explored the effect of national stereotypes on COO. Table 1 summarizes the core findings of this extensive literature review chapter, although it is not meant to be all-inclusive.

### **Country of Origin Effects (Single-Cue Studies)**

Most of the early studies of the country of origin effect on consumer evaluations of products manipulated country of origin as the only independent variable ("single-cue" studies). Schooler (1965) is credited for conducting the pioneering country of origin

empirical study. Guatemalan students evaluated identical products labeled to reflect different origins. His manipulation was simple, involving four different origin “labels” as the single information cue. Schooler (1965) found that Guatemalan students gave lower evaluations to products made in El Salvador and Costa Rica than to domestic and Mexican products. He attributed this bias to a general negative attitude toward people from the former two countries due to regional animosities among these Central American neighbors, but offered no empirical evidence to support this assertion. The author concluded that the country of origin of a product has an effect on its consumer evaluation.

Bilkey and Nes (1982) conducted a critical review of the country of origin literature. They concluded that all of the reviewed empirical studies found that country of origin did significantly influence product evaluations. However, they also noted concern that almost all of these early studies involved a single cue; that is, country of origin was the only information on which respondents based their evaluations. Any single cue study is likely to yield a significant cue effect, regardless. It can also be argued that in single-cue experiments, subjects might discern the researcher’s hypotheses regarding a country of origin effect, thus creating a demand effect in subject response. Several more recent studies have been multi-cue, with the country of origin cue being evaluated in the presence of several other cues such as, price, brand, retailer name or warranty. They will be reviewed in the next section of this chapter.

Nevertheless, a meta-analysis of twenty-two experimental investigations of country of origin cue effects on consumer judgment and choice revealed that across the experiments, the number of information cues did not significantly impact the size of the country of origin effect estimate (Liefeld 1993). The author concluded that the mean effect

size of the country of origin cue was found to be slightly lower for multi-cue than single-cue experiments (0.19 versus 0.22), but that the difference is not large enough to warrant a conclusion that single-cue experiments inflate country of origin effects. However this meta-analysis should be interpreted with caution because of its small sample size.

On the other hand, a more recent meta-analysis with the larger sample size of fifty-two articles, suggests that single-cue studies produce significantly larger country of origin effect sizes on product quality perceptions than multiple-cue studies (0.30 versus 0.16). (Peterson and Jolibert 1995).

Bilkey and Nes' (1982) review concluded that country of origin influenced evaluations of products in general, for classes of products, for specific types of products, and for specific brands. The country of origin effect was confirmed across consumers and industrial purchasing agents (Nagashima 1970, 1977) as well as developed or less-developed source and consuming countries.

### **Country of Origin Effects (Multi-Cue Studies)**

The early studies of the country of origin cue reviewed in the previous section generally found a strong effect on consumer evaluations of products. Nevertheless, in these studies country of origin was the only cue presented, leading to possible demand effects. The potential for such demand artefacts in single-cue country of origin studies led researchers to suggest a multi-cue approach in investigating the impact of country of origin information, when simultaneously presented as one of many other product information cues.

In these multi-cue studies, country of origin is only one of a number of extrinsic product cues (such as, brand name, price, retailer reputation, warranty, and the like) that are presented or manipulated in order to assess their relative significance to consumer evaluations of a product. In accordance with heuristic theory, country of origin operates as a signal of the unobservable attributes of a product, such as quality (Olson and Jacoby 1972). These multi-cue studies thus aim to investigate whether the effect of the country of origin cue diminishes in the concurrent presence of additional extrinsic cues.

Lim and Darley (1997) examined demand artifacts in country of origin studies using three alternative methodological approaches. The results of the three approaches indicate that the way the country of origin cue is presented may lead to demand effects. They found that the multi-cue advertisement format condition is less susceptible to demand effects than either the single-cue condition or the multi-cue list format condition. The three methods show demand artifacts are most plausible when using the single-cue condition.

Using *omega-squared* as the measure of effect size, Peterson and Jolibert (1995) found that such multiple-cue studies produced smaller but still significant effect sizes. Their meta-analysis showed that the country of origin cue accounts for a substantial proportion of the variance in product quality perceptions, and to a smaller extent, in purchase intentions.

In an early multi-cue study by Johansson et al. (1985) that included 13 product attributes, the country of origin of an automobile was found not to effect overall ratings, but to have some effect on specific attributes. The study concluded that country of origin effects, though significant, are relatively minor and do not reflect a general stereotype. Their findings supported the hypothesis that the country of origin is used as a surrogate

variable to evaluate a product when consumers have limited familiarity with particular products.

Ettenson et al. (1988) presented conjoint analysis as an alternative method to attitude surveys. Information on six product attributes, including country of origin, was presented in a study of clothing products (blouse and shirt) choice, before and after exposure to a “Made in the U.S.A.” promotional campaign. Their results found the country of origin effect to be relatively small, both before and after the launching of the campaign, and smaller than that of the price and quality attributes.

Okechuku (1994) also used conjoint analysis to investigate the relative importance of the country of origin of two product categories (television sets and car radios) to consumers in the U.S., Canada, Germany, and the Netherlands. The other cues were brand, price, quality and warranty. The results of the study showed that, in all four consuming countries, country of origin is consistently ranked as one of the top three attributes in product evaluations. It was often as important as, or more so than, the brand name and the price. Attempting to explain the discrepancy with the findings of the Ettenson et al. (1988) study, Okechuku (1994) attributed it to the difference in the product categories studied. Kaynak and Cavusgil (1983) and Zhang (1996) also found that country of origin effects tend to increase with the technological complexity of the product. Therefore, the country of origin cue would be less important with shirts and blouses than with televisions and car radios.

Thorelli et al. (1989) utilized an experimental design that involved two levels of three extrinsic cues – retail store image, warranty and country of origin. The study found that all main effects of the three cues were significant, with country of origin having a

larger effect than retail store image, but lower than the warranty. The authors also reported a significant three-way interaction of the three cues on the dependent measures of perceived quality and overall attitude. A subsequent study of Taiwanese consumers also found country of origin to have a significant effect on perceived quality, but store prestige was found to have no effect at all (Lin and Sternquist 1994).

Wall et al.'s (1991) experimental study found country of origin to be more important in influencing product quality assessments than price and brand. For all three products in their study (shirt, wallet and telephone), lower quality ratings occurred for the developing country (South Korea) and higher quality ratings for the developed country (U.S.).

Cordell (1991) conducted an experimental study whereas subjects exercised product choices in which country of origin, competitive context (information on the hierarchical relationship of products in a choice set), and price and financial risk were manipulated. His findings suggest that consumers are more skeptical of products from less developed countries when the financial risk is higher and when seeking a product with superior tangible attributes. However, within a given product category, price did not produce interaction effects with country of origin.

Lee et al. (1992) conducted a conjoint analysis to measure the relative importance of price, warranty and country of origin information in an experimental design. They found the price factor to have the highest relative importance, with the warranty second and country of origin, though still significant, third.

Elliot and Cameron (1994) also found country of origin to be significantly less important as a choice determinant than other cues, in this case quality and price.

Nevertheless, they observed that, when these other factors are equivalent, the fact that a product is locally made has a positive influence on product choice.

Knight (1999) compared American consumer preferences for goods made abroad versus the home country by both foreign and home-country firms, in a multi-attribute manipulation. Using conjoint analysis, his results suggest that country of manufacture and product quality strongly influence consumer decision making in globally available product categories. Specifically, compared to imported goods, consumers appear to prefer domestically manufactured goods and are often willing to pay a higher price for them.

Astous and Ahmed (1999) reported on the results of a conjoint analysis that compared consumer evaluations of VCRs produced in 13 countries. They found that the country of design and country of assembly cues had a larger effect on consumer perceptions of product quality than the cues of brand, price and warranty, with the country of design attribute having the largest effect.

In a study of the cognitive processes associated with the effects of country of origin and other product cues, Hong and Wyer (1989) suggested that in addition to a direct effect, the origin cue encouraged subjects to think more extensively about other product attribute information. However, a subsequent experiment found that these effects are likely to be evident only when country of origin information is conveyed some time before (one day before) other attribute descriptions, allowing a separate concept of the product to be formed on the basis of it (Hong and Wyer 1990).

The predictive value of any cue, including country of origin, is perhaps influenced by a host of moderator variables such as, as the technical complexity of the product, consumer involvement, product class familiarity and prior experience, and consumer

ability to detect inter-brand quality differences (Eroglu and Machleit 1989). Brand familiarity may also play a role. Schaefer (1995) found that objective product-country knowledge increases consumers' reliance on country of origin in evaluating a product, particularly if the brand name of that product is unfamiliar.

In summary, the multi-cue studies reviewed in this section confirmed the importance of the country of origin cue on consumer evaluations of products, even in the instantaneous presence of additional extrinsic cues. In these multi-cue studies however, the country of origin effect was found to be somewhat lowered.

### **Country of Origin Effects (Hybrid Products)**

Further complicating the issue of country of origin effects is the globalization of manufacturing and sourcing, resulting in the proliferation of hybrid products of a dual (or multi) origin. These are products made in a country that may, or may not, be the corporation's home country and often include components, ranging from parts to design inputs, from third countries. A key research question is whether in the case of hybrid products, the brand name cue (e.g. SONY) can in fact override the effect of the country of manufacture cue (e.g. Mexico).

Some observers contend that origins are no longer relevant in global markets where hybrid products are the norm (Ohmae 1989). Others maintain that the opposite is true since globalization will bring about specialization based on national competitiveness factors, and thus further crystallize the images of the countries of design and manufacture. This coupled with the greater consumer awareness of and familiarity with foreign products could accentuate the country of origin effect (Papadopoulos 1993). In addition,

multinational corporations may deliberately select whether to place more promotional emphasis on country of design versus country of manufacture based on the perceived favorability of each origin cue by consumers.

Johansson and Nebenzahl (1986) measured changes in the perceived monetary value of a product that results from moving its production away from the home country of the corporation, by using a “dollar preference” scale, as a measure of purchase intentions. They reported that a company could improve its brand image significantly by building its cars in a higher-status country. Apparently the higher-rated car-producing country (e.g., West Germany) confers some added benefits onto the brand (e.g. Buick) by eliminating the association to the less favored home country (e.g., U.S.). Conversely, a lowly regarded host country (e.g. Philippines) does damage both directly to the brand and by disassociating the brand from its home country. These results are confirmed by a recent conjoint analysis by Seaton and Laskey (1999). Specifically, they found that a change in the production location of a \$17,000 automobile from the U.S. to Mexico results in a change in perceived monetary value of \$1,952. In the authors’ opinion, the application of this “dollar-scale” enhances the managerial relevance of the country of origin effects, and therefore should be of particular interest to the field of Foreign Direct Investment decisions about the manufacturing and sourcing location of products.

Using an experimental design, Han and Terpstra (1988) found that in the case of bi-national products, the source country cue (the country of manufacture) has greater effects on consumer evaluations of product quality than the brand name cue. This was found to be the case across all the product categories and across the experimental designs with different source countries. The authors suggested that when a corporation relocates

manufacturing to a country with an unfavorable image, it should attempt to conceal its production location by including references to other more favorable product information.

These results are supported by another experimental study by Tse and Gorn (1993) that found the country of origin cue to be an equally relevant and more lasting factor in consumer product evaluation than the brand name. However, when country image was partitioned into separately presented component and assembly origin cues, its effect was weakened (Tse and Lee 1993). A strong positive component origin effect was found to supersede any negative assembly origin effect. The breakdown of a bi-national product's origins (e.g. "components from Japan and assembled in South Korea") can thus eliminate the potentially negative effect of the country of assembly, assuming a favorable component origin. Furthermore, a strong positive brand (e.g. Sony) was found to override a negative component origin effect (Tse and Lee 1993).

In a multi-cue experiment, Ulgado and Lee (1993) found that, when brand name and country of manufacture were the only information cues specified about a product, consumers used both in evaluating the product. However, when additional product attribute information was available, it was discovered that consumers relied more heavily on the brand name information. This evidence is consistent with the findings of the majority of the multi-cue studies reviewed in the previous section, according to which, in the presence of other information cues, the country of origin effect is weakened but certainly not diminished.

Chao (1993) also partitioned the country of origin construct into two specific origin cues, country of assembly and country of design. The results showed that consumer

evaluations of a hybrid product's quality are influenced by the price, country of design, and country of assembly cues, in that order.

Similarly, Ahmed and Astous (1995) found that country of design and country of assembly have about equal importance but brand name is a more important cue than either of the origin ones. Furthermore, the presence of warranty information reduced the negative hybrid effect. Using an experimental design, Tan and Leong (1999) confirmed that consumers tend to perceive lower quality and higher perceived risk when evaluating products manufactured in a country perceived to be of lesser capability than its country of design. However, they also found that these negative hybrid effects could be surmounted by an appropriate warranty strategy. Their results show that consumers improve their assessment of hybrid product when these products carry warranties with wider coverage and longer duration than the standard.

Nebenzahl and Jaffe's (1996) examination of the joint effect of brand and country of manufacture image found that when no country of manufacture is specified, the image of a branded product is similar to the image of the same product when its home country is actually specified as the country of manufacture. Apparently, in the absence of country of manufacture information, consumers supply the missing information by assuming that the country of manufacture is the "home" country associated with the brand.

Iyer and Kalita's (1997) experimental research included country images for both the country of brand origin and the country of manufacture, and found that both cues are important in consumer evaluations of product quality, perceived product value, and willingness to buy. The authors contended that, while brand equity may be important for

removing the debilitating effect on perceived quality due to sourcing from other countries, the positive effects of brand equity might be limited.

The above study found a strong effect of country of manufacture information across all product categories. However, the relative salience of the country of manufacture and country of brand origin cues varied according to product type: For non-technical fashion products (e.g. Jeans), country of manufacture information was more important than for low-technology technical products (e.g. Stereos). This was attributed to the greater degree of product standardization and transfer of manufacturing skills permitted by “low-technology technical products” as compared to “non-technical fashion products.” The authors argued that the latter product category, may require design expertise and creative innovation that cannot be easily transferred (Iyer and Kalita 1997).

The findings of the reviewed literature on the effect of hybrid products, suggest that the effect of the perceived “home” country can overcome the impact of the country of manufacture only to a certain extent, but not remove it completely. The studies cited in this section provide evidence that the positive effect generated by well-known global brand names (e.g. Sony) may not always outweigh the negative impact of country image, when production is sourced in less developed countries. The relative contributions of the brand’s perceived COO, the country of design and the country of manufacture to COO-based evaluations remain inconclusive. For example, the Han and Terpstra (1988) and Tse and Gorn (1993) studies found that country of manufacturing has a larger effect on evaluations than country of brand. More recent studies, however, have found the opposite effect (Hui and Zhou 2003, Srinivasan et al. 2004).

### **Effect of Product Type**

Country of origin effects have been shown to vary by product type. While some inferences about the country of origin and its peoples are globally projected onto all the products associated with that country (i.e., the overall effect of the national brand), research has shown that country quality perceptions may also vary across product categories. For instance, Kaynak and Cavusgil (1983) found that Japanese electronic products received high quality evaluations while Japanese food products received low ones. Thus, while overall product-country quality stereotypes do occur at the macro or global level, country image appears to be also operating at the micro or product type level.

Roth and Romeo (1992) empirically tested a framework that coordinated the importance of product category dimensions (innovativeness, design, prestige and workmanship) with the perceived image of the country of origin along the same dimensions. Accordingly, a study was designed to determine which dimensions were most frequently associated with a country's image and how vital these characteristics were to different product categories. The authors found that such perceptual links can be either favorable or unfavorable. A product-country fit occurs when the perceived country image dimensions (e.g. German punctuality) are related to desirable product characteristics (e.g. watches). Consumers' willingness to buy was found to be high when countries were evaluated highly on dimensions that were also important to these product categories (Roth and Romeo 1992). Thus, perceptions vary depending on how well the country's perceived manufacturing and marketing strengths are related to the product category, in other words on the favorability of the country image versus product dimensionality fit.

Agarwal and Sikri (1996) examined whether pre-existing country images can

transfer to and influence judgments of new products. Their study found that there is considerable association between beliefs held for the most well known product category from a country and expectations for new products. Further, it was found that the transference of consumer beliefs to the new product was greater when the perceived similarity between the well-known product and the new product was higher. This was found across all three dimensions of country image (technology, prestige and price) that resulted from a factor analysis of 24 original items in the study.

Johansson et al. (1985) suggested that consumers often use country of origin information as a heuristic in product evaluation. This tendency is strongest if knowledge or awareness of product attributes is low or not very accurate. Therefore, it may be expected that when consumers shop for products, which possess features that are relatively complex and difficult to evaluate, they may be more likely to rely on the country of origin image of a product to aid them in their evaluation. Hadjimarcou and Hu (1999) confirmed that more complex tasks seemed to amplify the use of country of origin information, especially if they implicated ambiguous information. As a result, country of origin information may be more important for a durable product with more complex features (e.g., television sets) than a common non-durable product with simpler features (e.g., shirts). Zhang (1996) conducted an experimental study and reported the existence of moderating effect, attributed to the durable/complex versus non-durable/simple product type variable. As expected, the study confirmed that the country of origin effect was more important for a television set than a shirt in the minds of Chinese consumers.

Liefeld's (1993) meta-analysis also indicated that the magnitude of country of origin effects is related to product type. Specifically, the magnitude of the country of origin

effect was found to be larger for technically complex products, fashion-oriented products, and expensive products than those for products that are low in technical complexity, inexpensive, or not fashion-oriented.

Peterson and Jolibert (1995) found inconclusive results in their own meta-analysis. Product type was not related to the country of origin effect size for the dependent measure of quality perceptions, but was significantly related to effect size for the other dependent measure of purchase intentions. The authors suggested the need to treat the perception and intention dependent variables differently and recommended that they be included and analyzed separately in future country of origin studies.

An alternative explanation may be that product type, although obviously an important moderator or interaction variable, has not been properly operationalized in the country of origin literature. As Leclerc et al. (1994) found, products with a French association are perceived to be more hedonic than products that lack this association. Preliminary experimental evidence previously published by this author suggests a significant moderating effect of hedonic-utilitarian product type on country of origin product evaluations (Chattalas and Hadjicharalambous 1999). This research implication will be further discussed in the hypotheses chapter of this dissertation.

### **Effect of Country-Product Familiarity**

The fundamental “information processing” paradigm that has guided country of origin research is that consumers evaluate products on the basis of cues, namely intrinsic (e.g. taste, style, performance, quality) and extrinsic (e.g. brand name and price) (Olson and Jacoby 1972). Consumers apply extrinsic cues in evaluating a product because they are

often unable to detect its true intrinsic attributes prior to actually experiencing it. Thus, the country of origin cue is conceptualized as one of these extrinsic cues.

Han (1989) found that consumer perceptions of quality for products made in a given country (defined as “country image”) may serve either as a halo or summary construct depending on how familiar consumers are with a country’s products. His experimental results suggest that when consumers are not familiar with a country’s products, country image may serve as a halo from which consumers surmise a brand’s product attributes and which effects their attitude toward the brand indirectly through product attribute ratings. In this case, country image is based on whatever knowledge or stereotypes the consumer has about these countries, including their level of economic, political and social development, which in turn, effects product evaluations. According to the halo construct hypothesis, country image operates as a halo, allowing consumers to conjecture the quality of an unfamiliar foreign brand. In contrast, as consumers become more familiar with a country’s products, country image may become a construct that summarizes their beliefs about product attributes, directly effects their attitude toward the brand.

Maheswaran’s experimental study (1994) provided additional empirical support for the halo construct hypothesis when product familiarity is low (for “novices”) as well as when product information is ambiguous. As product-country familiarity increases, consumers increasingly employ country of origin as a summary construct.

### **Longitudinal Effect of COO**

Country of origin attitudes may change over time. Nagashima’s (1970 and 1977)

longitudinal studies of Japanese businessmen's "made in" perceptions indicated an improvement in the Japanese image and a relative weakening of the U.S. image during that period.

Wood et al. (1999) conducted a longitudinal "gap analysis" of U.S. versus Japanese product and marketing efforts. Using empirical evidence gathered in Finland every five years (from 1975 to 1995), their research explored which dimensions of marketing strategy contribute most to consumer perceptions and preferences over time. The Wood et al. (1999) study found that, in the minds of the Finnish consumers, the product competitiveness of U.S. products was significantly less than it was for products from Japan. This is true for each of the five time periods investigated. However, the gap between the two countries' perceptions narrowed during the 1990 to 1995 period, indicating that over time, perceptions of U.S. product competitiveness has improved.

In an earlier study, Finnish appreciation for British products appeared to have declined during the period between 1975 and 1985 (Darling 1987). Wood and Darling (1993) reported on a similar study of Finnish perceptions of Soviet products from 1975 to 1990 (Finland was a major trade partner of the now defunct U.S.S.R.) relative to products originating from seven Western countries. They found that perceptions of products as well as of marketing practices regarding Soviet-made products were significantly worse than all origin countries. This was consistent for each of the four time periods investigated, and over time these perceptions have become more pronounced.

Some studies have investigated the impact of events such as the Olympics on country images. Jaffe and Nebenzahl (1993) conducted a survey in Israel, two months before and two months after the 1988 Seoul Games, in order to determine whether the

image of South Korean products had changed as a result of consumer exposure to promotion and television exposure during the Olympics. They indeed found that, as a respondent's exposure to the Olympic Games increased, attitudes toward the electronic products made in South Korea improved, as well as the overall image of South Korea as a producing country. Chattalas' (1999a) historical analysis of the utilization of the Olympics as an instrument for national image promotion also supported the potential role of the Games in improving perceptions of a host country and its products. The study documented the significant improvement of the country-product image of Japan as a result of hosting the 1964 Tokyo Olympics.

Nebenzahl, Jaffe and Lampert (1997) posited that in the case of hybrid products, which are sourced in more than one country, there might be a dynamic three-way interaction between the brand's image, the image of the country of assembly and the image of the country in which the corporation is headquartered or perceptually associated with. For example, a well-known global branded product such as a Sony television set when sourced in a weak image country such as Russia may improve the country image of Russia and erode the brand image of Sony. The erosion of Sony's image may also mediate the country image of Japan due to its affiliation with the country, even though the actual product was not produced there.

Lampert and Jaffe (1998) suggested a dynamic model of country of origin effects to explain how, over time, the different brands associated with a particular country are reflected in the updated country image through "image crystallization." They define crystallization as "the extent to which a country's image is incrementally formed into a unified and consistent construct." The more consistent the national image across brands,

the higher its level of crystallization. Practically, one would expect that a highly crystallized image would result in a perceptual map where the different brands will tend to cluster together on common characteristics, thus summarizing the position of the national brand.

Niss (1996) conducted a depth-interview analysis of Danish exporting managers and reported that companies, which are untested in international marketing, tend to heavily utilize country of origin references as a differentiation tool. However, as companies become more established in their export markets, the tendency is to gradually disassociate from national image marketing, turning instead to brand-based marketing that focuses on creating and communicating a strong global brand image.

### **Measurement of Country of Origin Effects**

A major methodological weakness in the country of origin literature is its reliance on poorly conceptualized and tested psychometric measures. The reliability ratings of the existing scales used in country of origin studies, most of which are simple variations of the 21-item scale introduced by Nagashima (1970), are generally low. The Nagashima scale was never validated through the application of a psychometrically rigorous scale-development methodology. Alarming, when Jaffe and Nebenzahl (1984) tested the Nagashima scale, they found that the scale in fact does not provide the same dimensions originally assumed by its author. In addition, their reliability study yielded low coefficient-alpha values. Furthermore, from a conceptual perspective the widely used Nagashima scale and its variations do not clearly distinguish whether it is country image or country of origin product image that is being measured, thus confounding the two

constructs. 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 in the definition. If country image is being measured, the scale items should capture country equity-related (and not product-related) attributes.

Martin and Eroglu (1993) contributed a rare attempt in the consumer behavior literature to develop a psychometrically tested measurement scale of the multi-dimensional construct of country image. Factor analysis of their final 14-item scale, confirmed the presence of three factors: a political dimension, an economic dimension and a technological dimension. Their fourth hypothesized factor of "social dimension" could not be confirmed as a factor of country image. It could be argued that the reason for their finding is that social and cultural factors are perhaps part of the other component of national images, namely, ethnic image (which was not part of their conceptualization). More effort is required in developing psychometrically sound measures of country of origin effects on product evaluation, as well as of its antecedents of country and ethnic image.

More recently, Knight et al. (2003) developed and validated a new scale to measure country of origin image. Using cross-cultural data from Japan, Turkey and the USA, the authors developed a ten-item, seven-point Likert scale that interestingly includes three items related to attitudes towards a country's people (the people of the country are "well-educated", "friendly toward the USA in international affairs" and "the technical skills of work force are high").

### **Effect of National Stereotypes on Country of Origin**

In addition to its role as a cognitive shortcut, COO connects a product to an associative network of national stereotypes with cognitive, affective and normative connotations. Obermiller and Spangenberg (1989) proposed a theoretical framework to integrate the various ways in which COO influences consumers, distinguishing between cognitive, affective and normative processing of the country of origin cue. As a cognitive process, COO is a heuristic for making judgments about product quality. As an affective process, COO is a stereotype-driven attribute that connects the product to positive and/or negative emotional associations with nations (Verlegh and Steenkamp 1999). Lastly, as a normative process, consumers may hold socially desirable behavioral norms linked to COO cues. When such norms exist regarding the “political correctness” of purchases of products from specific nations, or of all foreign products for that matter, COO may effect purchase intentions directly, regardless of any product-related beliefs.

Consumers hold stereotypes of products, brands and corporations as well as of the nations associated with them, and generally these stereotypes effect their consumer judgment and behavior. Similarly to brand attitudes, country of origin effects depend on stereotypes of nations that are socially constructed and shared. Very few studies have investigated the impact of national and country stereotypes on the COO effect. Heslop and Papadopoulos (1993) found that the cognitive, affective and normative factors of national stereotypes effect COO-based product evaluations. In their influential study, Heslop and Papadopoulos (1993) investigated the linkages between views of countries and their culture with views of products. Their empirical study included an eleven-item “country-people” scale, thereby combining country and ethnic image as one single

construct. Importantly, factor analysis indicated three underlying constructs, showing the following scale items loading on each factor: a) “affect” (refined taste, trustworthiness, role in world politics, and likeable people; b) “belief” (industriousness of the people, management of the economy, and technological advancement; and c) “behavioral link” (more investment, closer ties).

In a study of country-related (rather than nation-related) images, Martin and Eroglu (1993) found that the political, economic and technological factors of country stereotypes effect COO-based product evaluations.

From a cognitive perspective, Shimp et al. (1993) applied perceptual mapping techniques to examine the cognitive structures that consumers hold of countries. Their study revealed that consumers use relatively few types of thoughts when discussing products made in various countries and that the depth of consumers’ cognitive structures varies greatly from country to country. Furthermore, the study showed that cognitive categories of countries are identifiable in relation to the memory-based representations consumers have when thinking about the products made in these countries. The authors proposed the term “country equity” as a way of conceptualizing the role of country image in its role either as a halo construct or as a summary construct. The notion of country equity serves to distinguish the equity enclosed in a brand (brand equity) from that contained in the country with which the brand is perceptually linked.

As Verlegh and Steenkamp’s (1999) meta-analysis concluded, the country of origin construct may activate cognitive, affective, and normative responses toward a nation and its people that are connected to the construct of national stereotypes and its specific contents, operating on a higher level of abstraction. Investigating the role of national

stereotypes as an important antecedent of the COO effect can advance our understanding of COO-based evaluations, given that COO cues activate an entrenched perceptual network of stereotype content.

### **CHAPTER 3: CONCEPTUAL FRAMEWORK**

The previous chapter reviewed a large number of published studies in the country of origin literature. Notwithstanding the large attention in investigating the country of origin phenomenon, there has been scarce attempt to integrate the consumer behavior literature with social cognition theory on the formation, contents and behavioral applications of national stereotypes. As a result, the country of origin literature has developed or applied modest theory on how these product attitudes are fashioned in the first place and how they may be related to the more abstract national stereotypes construct. From a managerial point of view, if national governments and multinational corporations were aware of the impact of these antecedents of country of origin effects, they would be able to develop more effective positioning strategies.

A brief review of the pertinent social science literature on national stereotypes with theoretical implications for the country of origin construct is presented in the next sections. Social categorization theory and social identity theory are two significant research paradigms in the study of group perception and are discussed first. Research on the specific contents of national stereotypes is reviewed next, culminating with a review of the Stereotype Content Model (SCM), a recent theoretical development in the study of national stereotype contents that is particularly useful in exploring the relationship between national stereotypes and COO-based evaluations. As such, the SCM provides a foundation for this dissertation's proposed theoretical framework and hypotheses, summarized in the schematic shown in Figure 2.

## **Social Categorization Theory**

Stereotypes have been defined as “beliefs about the characteristics, attributes, and behaviors of members of certain groups” (Hilton and Von Hippel 1996). In essence, stereotypes are mental representations of real and/or perceived differences between groups.

Social categorization theory offers a cognitive explanation for the formation and usefulness of social group stereotypes (including of course, national stereotypes) that is based on the application of schematic knowledge structures when perceivers think about others. As such, stereotypes operate like schemas, allowing easier and more efficient processing of information about others. In an environment overloaded with information and complex decisions, stereotypes can offer a variety of coping strategies.

Perceivers are motivated to categorize phenomena, objects (i.e. products) and individuals because it provides them with a means of simplifying the external environment (Allport 1954), permitting more efficient information processing. Rather than taking into account the unique conglomerations of traits that shape an individual target, perceivers prefer instead to interpret them on the basis of social categories that they belong, categories for which a wide range of interconnected material reside in long-term memory (Macrae and Bodenhausen 2000). Once a person or culture have been categorized as of a particular type (category), inferences may be made based on associated schemas. Importantly, race and ethnicity, gender and age, are generally considered as the top three “primary” social categories, particularly since they are physically obvious and therefore socially useful (Fiske 1998).

As Macrae and Bodenhausen (2000) pointed out, when activated, categorical

thinking can influence interpersonal perception in at least two ways:

First, individuals may use their knowledge structure to steer the processing of any target-related information that comes across (Macrae and Bodenhausen 2000). In a consumer perception setting, such tasks may of course include the evaluation of products associated with a particular national group.

Second, perceivers may use the contents of their activated knowledge structure to develop evaluations of a particular target (i.e. person or group); a process that frequently gives rise to stereotype-based evaluation behaviors (Fiske et al. 2002).

Social categorization theory basically views this process as “a cognitive shortcut or mental heuristic” (Fiske 1998). On the whole, categorical thinking offers concrete benefits, such as speedy inference formation and efficient cognitive performance (Macrae and Bodenhausen 2000). Importantly, stereotypes allow people to incorporate a person who fits within the generally established boundaries of the out-group, making people more comparable to their stereotype contents than they actually are (Leyens et al. 1994).

An expansive literature has confirmed that the process of category application is more likely when a perceiver lacks the motivation, time, or cognitive capability to think profoundly about others (Macrae and Bodenhausen 2000).

### **Social Identity Theory**

Social categorization theory builds on social identity theory (Tajfel 1981) according to which, successful inter-group bias creates or protects relatively high in-group status, thereby motivating a positive social identity for in-group members and satisfying their need for positive self-esteem. Tajfel (1981) proposed that prejudice results from the

need for a positive social identity with an in-group, which recruits the out-group as a relatively devalued construct. The simple perception of people belonging to different groups invites in-group favoritism and out-group discrimination. This explains the “ambivalence” in the stereotype content reported by Fiske et al. (1999 and 2002): Only one’s in-group is supposed to be high on both the competence and warmth dimensions. Categorizing people into in-groups and out-groups minimizes within-group differences and maximizes between-group differences.

Social identities refer to “conceptualizations of the self that derive from perceived membership in cognitively and emotionally significant social categories or groups” (Tajfel 1981). Categorization processes, in turn, depend on the contextual salience of groups and their perceived boundaries (Fiske 1998).

A consequence of heightened national identification salience is the emergence and proliferation of socially shared stereotypes about out-groups. The testing of social identity theory has empirically demonstrated that the sheer perception of belonging to two different groups is adequate to incite inter-group competition and discriminatory or stereotypical responses against outsiders (Tajfel 1981).

### **National Stereotype Contents**

In an influential work in political science, Boulding (1956) conceptualized the “image” of a nation as “the total cognitive, affective and evaluative structure of the person constructing and exhibiting it.” This conceptualization mirrors the previously discussed cognitive, affective and normative mechanisms for COO-based effects. The “evaluative” component of national “image” in particular, provides a link between the cognitive and

affective aspects of national stereotypes and COO-based evaluations.

Scott (1965) added a fourth component of national images, the action component. This component consists of the types of international behavior that perceivers consider appropriate in light of their national images, ranging from competitive to cooperative. Holsti (1964) provided further empirical support for the existence of this behavioral component of national stereotypes. In his study, international relations decision-makers were found to act upon their definition of the situation and their images of foreign states. It could be argued that it is this behavioral component of national images that provides the causal link between attitudes toward a country and its people, and consumer evaluation concerning products originating in that country.

An important research question concerns the dimensionality of national stereotypes. Some of the earlier social sciences literature provided empirical support for at least two distinct dimensions: stereotypes held about a country's economic and political environment ("country image") and stereotypes held about a country's cultural environment and its people ("national" or "ethnic" image).

A number of studies support the validity of the above dimensions: Wish et al. (1970) interpreted that: a) economic development, b) political orientation, c) geography and population, and d) culture and race are the principal dimensions. Nincic and Russett (1979) reported that favorability toward a nation is a function of "objective" economic (trade and investment) and "military interest" perceptions ("country image") on the one hand, and "subjective" perceptions regarding the perceived social similarity to the subject's home country (based upon race, religion and language) on the other ("ethnic image"). Forgas and O'Driscoll (1984) asked respondents to rate the overall similarity

between country-pairs on a twelve -item scale. Using multidimensional scaling, three perceptual dimensions resulted: European/non-European (an ethnic dimension), communist/capitalist (a country dimension) and developed/underdeveloped (a country dimension).

Some studies investigated only the country image dimension of national stereotypes. Robinson and Hefner (1967) applying multidimensional scaling found two salient factors in the respondent's perceptual space: "communism" (a political environment factor) and economic development. Importantly, there is consistent support across the reviewed studies for the political and economic/technological dimensions of country image.

Most studies however have focused on attitudes toward a nation's people (national or ethnic image). Sherman (1996) defined these stereotypes as "a cognitive structure that contains the perceiver's knowledge, beliefs, and expectations about any human (e.g. national) group".

Katz and Braly (1933) conducted the first empirical study of ethnic stereotypes, by asking U.S. students to list the traits they considered most characteristic of ten ethnic groups. A high degree of agreement on the assignment of specific traits to ethnic groups was observed. The authors viewed this propensity toward a consensus in the categorization of ethnic groups as evidence of "group fallacy" at work, indicating the potential role of socialization in the development of ethnic stereotypes.

Some researchers have conceptualized national stereotypes as also including an affective component. Peabody (1985), for example, applied a thirty-two item scale designed to measure two hypothesized components of ethnic images: the "evaluative" (an

affective judgment) and the “descriptive” (a cognitive judgment) about national characteristics. Using factor analysis, three major dimensions were uncovered: “Tight versus loose control over impulses” (descriptive), “self-assertiveness” (descriptive) and a “general evaluative” component. It should be noted that public opinion-polls - such as the *Eurobarometer* survey of attitudes toward fellow nations in the European Union - are frequently being conducted on ethnic images, using items such as, “likeability”, “admiration”, “competence” and “trust”. These items are also commonly used to measure ethnic image in social-psychological scales (Peabody 1985).

### **The Stereotype Content Model: The Competence Versus Warmth Dimensions**

The Stereotype Content Model or SCM (Fiske et al. 1999 and 2002), a recent theoretical advance in the field of social cognition, posits that societal groups are universally perceived along two primary dimensions, warmth and competence. According to Fiske et al. (2002), perceived competence indicates “the target group’s perceived ability to be successful at tasks that are accorded high status or prestige;” whereas perceived warmth refers to “the target group’s perceived socio-emotional orientation toward others.”

The SCM proposes systematic differences in stereotype contents based on perceptions of the target group’s relative status and level of competitive threat, with status and competition predicting high competence coupled with low warmth. Groups that are perceived as powerful are stereotypically attributed as competent, whereas groups that are perceived as unable to pose a competitive threat, as warm. Their final study’s scales included six “perceived competence” traits (competent, confident, capable, efficient, intelligent and skillful) and six “perceived warmth” traits (warm, well-intentioned, sincere,

good-natured, friendly, and trustworthy).

The SCM highlights that most groups are simultaneously seen as high on one dimension but low on the other. The empirical testing of the SCM confirms that most out-groups receive mixed stereotypes (Fiske et al. 1999 and 2002). In the case of stereotypes toward “Asian-Americans” for example, the perceived high status and competitiveness of this group, resulted in higher perceived competence but lower perceived warmth scores (Fiske et al. 1999 and 2002).

The main implication of these studies is the existence of ambivalent stereotypes of two minds toward out-groups; namely, that stereotypes tend to be positive on one dimension, competence or warmth, but generally not on both. Although the SCM theoretically and empirically supports a two-factor model of stereotype contents, it also anticipates the correlation between the two dimensions (Lin et al. 2005). The only group typically viewed as both competent and warm is one’s own and its close allies; this follows from the in-group favoritism principle of social identity theory (Tajfel 1981).

Although, the SCM is the first conceptual model to systematically predict and test stereotype contents, a variety of past research in social cognition supports the relevance of competence and warmth dimensions. In a multidimensional scaling study of trait descriptions, Rosenberg et al. (1968) found the two underlying dimensions of interpersonal perceptions to be “social-evaluative” and “intellectual-evaluative.” An empirical study by Jamieson et al. (1987) confirmed that judgments of likeability and inferences of socially desirable traits intertwine in a “general social” dimension, whereas judgments of respectability and inferences of intellectually desirable traits interconnect in a “general intellectual” dimension of attraction. In a study of national stereotypes, Phalet and Poppe

(1997) found two bipolar dimensions, which they termed “competence” and “morality,” though “morality” included the confounding “warm” traits of honest, helpful, and tolerant.

The SCM findings add conceptual and empirical support to the Heslop & Papadopoulos (1993) exploratory findings regarding the dimensionality of national stereotypes. However, the SCM as put forth in this dissertation is a more useful tool in exploring the relationship between national stereotypes and COO-based product evaluations as it represents a theoretical advance in the study of stereotype contents, in contrast to the purely exploratory nature of the Heslop and Papadopoulos (1993) study.

The first reason why the SCM lends itself as a tool for COO research is that it posits that stereotypes are often *mixed* on competence and warmth, as defined by low ratings on one dimension coupled with high ratings on the other. This is a crucial theoretical advance from the Heslop & Papadopoulos (1993) conceptualization that stereotypes are uniform and consistent in nature, with no distinction between the relative effects of their “belief” and “affect”, arguing for a general attitude consistency explanation instead.

The second reason to apply the SCM is because it focuses not on personal stereotypes but on *societal* stereotypes; that is, stereotypes as culturally shared knowledge. Prejudice theorists have increasingly become interested in societal stereotypes, because even when individuals personally reject stereotypes that are prevalent in their cultures, they are well aware of and often cannot help but be influenced by them.

## **CHAPTER 4: RESEARCH HYPOTHESES**

The previous chapter developed a conceptual framework for the study of national stereotype effects on country of origin-based evaluation. As depicted in Figure 2, this chapter applies the Stereotype Content Model on product evaluation to develop a number of research hypotheses, centering on the particular ways that national stereotype dimensionality interacts with product dimensionality. The subsequent sections develop testable hypotheses for the two important consumer characteristics of familiarity with a country's products and involvement as moderator variables. Finally, product familiarity is delineated as a significant covariate variable in the model.

### **The National Stereotype Dimensionality/Product Dimensionality Interaction**

The country of origin cue has been shown to have a significant effect on consumer evaluations of products. Very little is known, however, on the relationship between country of origin effects and the contents of national stereotypes. In order to advance a deeper understanding of the country of origin construct, this dissertation advances a number of original research hypotheses.

The review of the social cognition literature revealed that national stereotypes are broad beliefs and judgments related to a country's people. Recent research has been able to demonstrate the impact of group stereotypes on a range of everyday behaviors. These cognitive structures are believed to specify a mass of schema-related behavioral tendencies including in a consumer context, product evaluations. Critically, all that it takes for one's behavior to be shaped by these action proclivities is the activation (i.e. priming) of the

relevant cognitive representation (Macrae and Bodenhausen 2000). It is hereby posited that like all stereotypes, national stereotypes influence the perception and evaluation of any object, including consumer products, that is associated with a certain national group.

National image has been defined as “the perceived characteristics (traits) of a nation’s peoples as judged by a person” (Peabody 1985). Stereotypes have been defined as “beliefs about the characteristics, attributes, and behaviors of certain groups” (Hilton and Von Hippel 1996). It would be interesting to examine the specific effects of the two dimensions of national stereotypes (perceived competence and perceived warmth) on different dimensions of products, especially since the reviewed literature suggests that country of origin effects can be moderated by product type. While some inferences about a COO and its peoples are globally projected onto all the products associated with that country (i.e., the overall effect of the nation as a brand), research has shown that COO-based perceptions may also vary across product categories. The reviewed literature supports the notion that a nation’s reputation in relation to particular product categories has a greater impact on consumer evaluation than its overall image.

A theoretically-driven classification is the distinction between hedonic and utilitarian dimensions of product attitudes. According to Voss et al. (2003), the hedonic dimension “results from the sensations derived from the experience of using products,” while the utilitarian dimension “is derived from functions performed by products.” Utilitarian products exemplify a “work mentality” that reflects the economic and functional benefits they provide, while hedonic products mirror an experiential view relating to the affective responses elicited by a product (Holbrook and Hirschman 1982). Hedonic products (e.g. fashion items, fragrances, leisure travel) are typically evaluated in

terms of how much pleasure they provide (a subjective and more affective judgment), whereas utilitarian products (e.g. appliances, computers) are judged more in terms of their functionality (an objective and more cognitive judgment).

Empirical research suggests that the hedonic and utilitarian product dimensions are not necessarily two anchors of a unidimensional scale (Batra and Ahtola 1990). Recently, Voss et al. (2003) developed and validated a scale that measures the hedonic and utilitarian dimensions of consumer attitudes toward product categories and different brands within those categories. Their study's results suggest that the hedonic and utilitarian constructs are two distinct dimensions of product attitude.

Although the consumption of many goods involves both dimensions to varying degrees, there is little uncertainty that consumers characterize some products as primarily hedonic and others as primarily utilitarian. Dhar and Wertenbroch (2000) defined hedonic goods as "ones whose consumption is primarily characterized by an affective experience, whereas the consumption of utilitarian goods is more cognitively driven." Recent research suggests that affective responses are more likely to have an effect on product evaluations that are based on hedonic rather on utilitarian criteria (Yeung and Wyer 2004). An empirical study by Mano and Oliver (1993) confirmed that products that rated high on a scale measuring hedonic attributes were closer to the consumer's affective experience, as measured by both a "pleasantness" and "positive affect" scale, than products that rated high on a utilitarian attributes scale. The study found that the utilitarian scale was not related to affect, confirming the hypothesis that utilitarian product evaluation is more cognitive and functional in nature, adding support to the notion that hedonic product evaluation is mostly affective while utilitarian evaluation is mostly cognitive.

In an influential experimental study, Leclerc et al. (1994) found that the French pronunciation of a brand name effects the perceived hedonism of products as well as attitudes toward the brand. According to their study, the concept of “Frenchness” brings to mind a rich network of associations related to the hedonic factor in product perceptions. Their study’s empirical data supports the notion that products associated with France or “Frenchness” are in indeed perceived to be more hedonic than products that lack this association. Thus it was found that, a French name with hedonic associations provides a better perceptual fit for hedonic products than an English name and result in more positive brand attitudes. For utilitarian products, on the other hand, a product with a French brand name was liked less than a product with an English brand name because of a poorer fit between the features triggered by the cultural stereotype and the product feature (Leclerc et al. 1994).

The classification of product attitudes into hedonic versus utilitarian dimensions based on their affective versus cognitive evaluations suggests that the warmth and competence dimensions of national stereotypes may differentially effect COO-based evaluations of products that vary in terms of their level of hedonic versus utilitarian attitudes. Given that the perceived competence dimension consists of intellectual and functional traits describing a country’s people, whereas the perceived warmth dimension consists of social and affective traits describing a country’s people, it is hereby hypothesized that perceived competence has a stronger positive effect on the evaluation of utilitarian products and that perceived warmth has a stronger positive effect on the evaluation of hedonic ones. More specifically, the following hypothesis is advanced:

**H1: National stereotype dimensionality interacts with product dimensionality, such that a greater level of perceived competence (versus perceived warmth) leads to more favorable evaluations of utilitarian products, and a greater level of perceived warmth (versus perceived competence) leads to more favorable evaluations of hedonic products.**

### **Country-Product Familiarity**

The fundamental paradigm that has guided COO research is that consumers evaluate products on the basis of intrinsic (e.g. taste, style, performance, quality) and extrinsic (e.g. brand name, retailer reputation and price) information cues (Olson and Jacoby 1972). Consumers apply extrinsic cues in evaluating a product because they are often unable to detect its true intrinsic attributes prior to actually experiencing it. Thus, the COO cue is conceptualized as such an extrinsic cue.

Use of extrinsic cues in COO-based evaluations has been shown to differ by consumers' level of expertise with the product (Eroglu and Machleit 1989). In this research, it is proposed that the level of expertise or familiarity also determines the effect of national stereotypes on COO-based evaluations.

According to Alba and Hutchinson (1987), familiarity is defined as “the number of product-related experiences that have been accumulated by the consumer over time.” Following this definition, in this dissertation, “country-product familiarity” refers to the amount of consumer experience (i.e. through ownership), familiarity and/or expertise with

a particular country's products, as perceived and self-reported by the consumer her (him)self. "Halo" has been defined as the "indiscriminant transfer of affect from one concept to another" (Alba and Hutchinson 1987). In the case of COO-based evaluation, it is conceivable that pre-existing national stereotypes serve as a halo from which consumers make inferences about all products associated with these stereotypes. Alba and Hutchinson (1987) proposed that novices are more likely than experts to rely on such halo-based evaluation processes.

It can therefore be postulated that in accordance with the halo construct condition, when familiarity with a particular country's products is low, national stereotypes operate as a halo, allowing consumers to evaluate any unfamiliar product associated with that nation (Han 1989). In contrast, as consumers become more familiar with a country's products, the author posited that "country image" becomes a "summary" construct that encapsulates their beliefs about these products' attributes, thus directly impacting their COO-based evaluations of all products associated with the country, while decreasing the effect of national stereotypes. Maheswaran (1994) provided additional empirical support for COO operating as a halo construct when product familiarity is low or product information is ambiguous. The reviewed literature suggests that a consumer's level of knowledge or expertise with a particular country's products may impact the effect of national stereotypes on evaluation. It is thus hypothesized that:

**H2: A higher level of familiarity with a country's products weakens the effect of national stereotype on product evaluation.**

## **Involvement**

Involvement has been defined as “the intensity of an enduring psychological linkage between an individual and an object” (Petty and Cacioppo 1986). Two conceptual frameworks that account for the effect of involvement on the formation of attitudes are the heuristic/systematic model (Chaiken 1980) and the elaboration likelihood model (Petty and Cacioppo 1986).

The Chaiken (1980) model postulates that systematic processing that integrates all useful information will only occur at a high level of motivation and cognitive capacity. Alternatively, a lower level of motivation reduces the degree of systematic processing while increasing the utilization of heuristics, such as stereotypes, in the evaluation process. According to Petty and Cacioppo’s (1986) elaboration likelihood model, a higher level of involvement is expected to increase the motivation to engage in analytical information processing, leading to a lower reliance on cognitive shortcuts, such as stereotypes.

Adding support to the moderating role of motivation on the effect of mental heuristics, Fiske and Taylor (1991) proposed the “motivated tactician” metaphor as an extension of the “cognitive miser” metaphor that is based on an information-overload paradigm. The “motivated tactician” metaphor assumes that people normally engage in heuristics, unless motivated by their current goals or involvement level to go beyond them.

Since national stereotypes can serve as heuristic shortcuts, the above discussion suggests that their use may be moderated by consumers’ level of involvement. When involvement is high, the motivation to engage in information processing is also expected to be high, which in turn leads to analytical processing that discourages the use of national stereotypes heuristics. An experimental study by Gurhan-Canli and Maheswaran (2000)

confirmed the effect of involvement on COO evaluations. Their study found that under low motivation, consumers utilize COO as a basis for judgment. In contrast, under high motivation, consumers do not focus on the COO cue and any evidence about the COO is less likely to be incorporated in their judgments.

Although, it is usually expected that greater consumer expertise with a product category leads to more involvement, the relationship between involvement and familiarity with a specific country's products (hypothesis 3) is not known. Being a consumer expert in a particular product category may not necessarily result in higher expertise with foreign products or with the production and marketing capabilities and reputation of particular countries. It would therefore be desirable to investigate the role of involvement, as a separate construct to familiarity with a country's products and based on the reviewed literature, the following hypothesis is advanced:

**H3: A higher level of involvement weakens the effect of national stereotype on product evaluation.**

### **Product Familiarity as a Covariate Variable**

Covariates are “control” variables, which should be held at a constant level for purposes of the statistical analyses, if they are expected to have the potential to influence the dependent variable. In this dissertation, “product familiarity” refers to the amount of consumer experience, familiarity and/or expertise with a particular product category, as perceived and self-reported by the consumer him (her) self. Unlike the moderating role of *familiarity with a country's products, in general* on national stereotype effects discussed in

hypothesis 3, the level of subjects' *familiarity with any specific product category* - such as bicycles in this dissertation's experimental design - is not of theoretical interest to this study. At the same time, a consumer's level of expertise or knowledge with a particular product category could have the potential of introducing undesirable confounds in the product evaluation process, such as product category-specific cues beyond the ones included in the experimental study's manipulations (i.e. brand name, technical attributes or price considerations), without posing any predictable consequence on the effects of national stereotypes, per say. Furthermore, a number of previous COO studies have included product familiarity as a covariate variable (Srinivasan et al. 2004). As these studies have shown, consumer experts are more likely to possess product-related information beyond the manipulated constructs of interest to this study. Consequently, it is important to control for the possible confounding effect of subjects' product familiarity level with the product category (bicycles) employed in the experimental study on the previously hypothesized effects. Thus, it is expected that product familiarity has a covariate effect on product evaluation.

## **CHAPTER 5: METHODOLOGY**

The previous chapter developed a number of research hypotheses pertaining to the role of national stereotypes country of origin –based product evaluation. This chapter presents the between- subjects experimental design methodology employed to empirically test the research hypotheses. The chapter sections include a comprehensive presentation of the subjects and study design, research procedure, pretests, stimuli, independent variable manipulation and the independent, dependent, moderator and covariate variable measures.

### **Subjects and Study Design**

One hundred and twenty-three undergraduate students majoring in Business at a large U.S. university (Baruch College, The City University of New York) received partial course credit for participation. The subjects were recruited to participate in small group sessions according to the solicitation procedures established for the Department of Marketing's subject pool and the study received prior approval by the College's IRB (Institutional Review Board). Subject participation in the study was voluntary. Respondents were randomly assigned to conditions in a 2 (National stereotype dimensionality: perceived warmth or perceived competence) x 2 (Product dimensionality: hedonic or utilitarian) between-subjects factorial design.

The sample comprised of 64 females (52%) and 57 males (46%) with two respondents (2%) not reporting their gender. The mean age of the respondents was 23.5 years, with a range between 18 and 45 years. In response to the open-ended (fill-in format) question of "my nationality/ethnicity is \_\_\_\_\_," the subjects' self-reported national/ethnic

identification was classified as of various Asian/Asian-American (57 or 46%), European/European-American (31 or 25%), Latin/Hispanic-American (16 or 13%), African/African-American (11 or 9%), Caribbean/Caribbean-American (4 or 3%) and “mixed” (4 or 3%) national and/or ethnic backgrounds. The diversity of the sample is in accord with the aggregate student population in this urban, commuter university. Participants completed the questionnaires in groups of 10-20, taking less than twenty minutes.

### **Procedure**

Subjects in each of the four randomly assigned experimental conditions received a booklet that contained instructions, the experimental advertisement and the study questionnaire. In addition, they were asked to read and sign the IRB-approved informed consent form and return it separately. This procedure was designed to ensure the respondents' privacy. The subjects were told that they would be participating in a study that assessed consumer responses to different products. Following exposure to the experimental advertisement, subjects were instructed to review the sample advertisement and then complete the survey that followed it. The questionnaire included a set of questions that measured the dependent variable (product evaluation), independent variables (national stereotype dimensionality of perceived warmth versus perceived competence and product dimensionality of hedonic versus utilitarian) and moderator variables (country-product familiarity and involvement). The survey instrument concluded with three open-ended cognitive/affective responses questions, a fill-in question that asked subjects to recall the country of origin of the target product as a manipulation check, and three demographics

questions on gender, age and nationality/ethnicity (fill-in). Furthermore, subjects were instructed to respond with their initial or gut reaction, that there were no right or wrong answers and that the researcher was interested in their own personal reactions.

## **Pretests**

A series of inductive analyses and empirical pretests, designed to select the target product description and country of origin information featured in the study, were conducted with a different set of subjects from the same population as the experimental sample.

### *National Stereotype Dimensionality*

Italy and Germany were chosen as the perceived warmth and perceived competence treatment countries respectively, for a number of reasons. First, a cluster analysis of stereotypical perceptions of European countries, found that Italy was located in the “high” warmth and “low” competence countries cluster, while Germany was located in the “high-high” competence and “low-low” warmth cluster (Cuddy et al. 2004). Second, both Italy and Germany are among the world’s ten largest exporters of products, thus adding a realistic international marketing element to the national origin treatment. Furthermore, with the desirable exception of warmth/competence perceptions, the two countries are otherwise fully comparable in terms of economic (i.e. highly developed economies with analogous GNP sizes), political (i.e. democratic governments and members of the European Union and NATO), demographic (i.e. similar population sizes) and of course, geographic (European) dimensions.

In the national stereotype dimensionality manipulation pretest, Italians were indeed

perceived as significantly warmer ( $M_{\text{italian}} = 4.85$  versus  $M_{\text{german}} = 3.74$ ,  $F_{(1, 39)} = 15.18$ ,  $p = 0.001$ ) and less competent than Germans ( $M_{\text{italian}} = 4.33$  versus  $M_{\text{german}} = 5.41$ ,  $F_{(1, 39)} = 15.12$ ,  $p = 0.001$ ). The 6-item Fiske et al. (2002) perceived competence and perceived warmth scales (see Independent Variable Manipulation Measures section) were used in these pretests. As a result of the pretest, Germany was chosen as the study's high competence (and low warmth) stereotype dimension treatment and Italy as the high warmth (and low competence) stereotype dimension treatment.

### *Product Dimensionality*

A mountain bicycle was chosen as the study's target product with the intent to manipulate its perceived product dimensionality, for a number of reasons. First, in order to avoid the potential confound of the product category on the experimental treatment, it was determined to conduct the study on only one product that would then be manipulated in terms of its hedonic/utilitarian product dimensionality. Secondly, the favorableness of mountain bikes as a particular product category from Italy or Germany was projected to be equivalent, as subject familiarity with both Italian (the perceived warmth condition) and German (the perceived competence condition) bicycles was expected to be equally low. In affirmation, the main study's subjects rated their familiarity with Italian or German bicycles as evenly low ( $M_{\text{italian}} = 2.05$  and  $M_{\text{german}} = 2.00$ , on a 7-point scale,  $p = 0.82$ ). Further, it was anticipated that subjects did not have a discernible association with any Italian or German brand of bicycles (in fact, only five out of 123 participants in the main study could identify any Italian or German bicycle brand at all). Thirdly, a number of past COO studies had previously selected a mountain bike as the target product (i.e.

Gurhan-Canli and Maheswaran 2000, Maronick 1995, Roth and Romeo 1992), citing similar reasons.

In the product dimensionality manipulation pretest, subjects' consecutively rated the target product advertisements as “not utilitarian” versus “utilitarian” and “not hedonic” versus “hedonic” after reading the following two definitions: “Utilitarian products are mainly motivated by goal-oriented consumption” and “Hedonic products are mainly motivated by pleasure-oriented consumption” (see Independent Variable Manipulation Measures section). The pretests of the target product dimensionality manipulation indeed showed that the hedonic version was rated as significantly more hedonic ( $M_{\text{hedonic version}} = 5.88$  versus  $M_{\text{utilitarian version}} = 3.94$ ,  $F_{(1, 33)} = 12.70$ ,  $p = 0.001$ ), while the utilitarian version was rated as significantly more utilitarian ( $M_{\text{hedonic version}} = 3.76$  versus  $M_{\text{utilitarian version}} = 5.24$ ,  $F_{(1, 33)} = 6.52$ ,  $p = 0.01$ ).

## **Stimuli**

The advertisement stimuli paired visual and verbal attribute information about a target product (mountain bike) manipulated in the experimental conditions of either more hedonic (conveying an exciting mountain ride scenario) or more utilitarian (conveying a faster commute ride scenario) type attitudes, with country of origin information (Italian or German) manipulating the experimental conditions of the national stereotype dimensionality (see Appendix 2).

The experimental advertisement stimuli were of a color, magazine-style, single letter-size page format. The stimuli were prepared in accordance with standard advertising layout principles and were copied in color, in order to make them as realistic and

typical-looking as possible. The ads presented the product dimensionality (hedonic versus utilitarian) manipulation on the top-half of the page, followed by the national stereotype dimensionality (perceived warmth versus perceived competence) manipulation on the bottom-half of the page. In this experiment, Italy and Germany were the operationalizations (lower level of abstraction) of the high warmth and high competence levels of the national stereotype dimensionality (higher level of abstraction) respectively.

### **Independent Variables Manipulation**

#### *Product Dimensionality*

The product dimensionality (hedonic versus utilitarian) manipulations included a set of three consecutive cues; a headline, a color photo and a picture-caption.

The hedonic condition advertisement was designed to convey a scenario of pleasure and experientially oriented consumption. As such, the headline cue read, “It’s An Exhilarating Ride...” The word “exhilarating” was chosen as a synonym to the hedonic-scale, pleasure-related attributes of “fun”, “exciting” and “thrilling”. The word “ride” was chosen to prompt the experiential component of hedonic product attitudes. The hedonic condition photo portrayed a sporty rider biking on a grass trail against a generic mountainous background of no discernible geographic association. The photo’s elements were expected to manipulate the hedonic perception of the target product. The plain-looking bike was depicted in its entirety on a side view that was centered on the optical center of the ad (located approximately 5/8 up the page). This design follows standard advertising layout principles that aim to focus the respondents’ attention on the target product itself. Any brand-related cues were electronically removed from the bike in

the photo, in order to eliminate the confounding effect of brand image on product evaluations. The photo was followed by a picture-caption sentence that read, “Featuring superior color and design.” This third cue was designed to further reinforce the hedonic scenario depicted in the ad’s photo by adding information on two hedonic-related product attributes (color and design). These were adopted from the Gurhan-Canli and Maheswaran (2000) study’s empirical assessment of the importance of attributes of a mountain bike.

In the alternate utilitarian condition advertisement, the headline, color photo and picture-caption cues were selected to convey a scenario of functional and goal-oriented consumption. As such, the headline cue read, “It’s a Faster Commute...” The word “faster” was chosen to prompt the practical aspects of utilitarian product attitudes, as relating to the functional scenario of using a bike to effectively commute to school. The utilitarian condition photo portrayed a casual rider biking on a paved bike path against a generic watery and urban background that could be discerned as depicting New York City, that being the location of the sample’s university affiliation. The photo’s elements were expected to manipulate the utilitarian perception of the target product. As with the hedonic condition ad, the plain-looking bike was depicted in its entirety on a side view that was centered on the optical center of the ad and all brand-related information was electronically removed from the image. The photo was followed by a picture-caption sentence that read, “Featuring superior gear selection and brakes”. This third cue was designed to further reinforce the utilitarian scenario depicted in the ad’s photo by adding information on two utilitarian dimension-related product attributes (gear selection and brakes). These were also adopted from the Gurhan-Canli and Maheswaran (2000) study.

### *National Stereotype Dimensionality*

Mirroring the hedonic versus utilitarian condition manipulation, the national stereotype dimensionality (perceived warmth versus competence) manipulations appeared in the bottom-half of the ad and also included a set of three consecutive cues; a sub-headline, a color image of a national flag and an image-caption.

The perceived warmth and competence condition countries were Italy and Germany respectively. The ad stimuli were designed to manipulate the two stereotype dimension conditions without providing any qualitative information about the nations, their peoples or their associated products. In effect, the ad stimuli simply identified Italy or Germany as the country of origin of the target product by the use of “On your Italian (German) bike!” as a sub-headline cue. To further reinforce the COO cue, a color image of the Italian (German) national flag is included in the ads. The flag image is followed by a third COO cue that identifies the ad’s (fictitious) sponsor, “Sponsored by the Italian (German) Bicycle Association” and website address ([www.iab.it](http://www.iab.it) or [www.gab.de](http://www.gab.de)), thus adding another realistic element to the stimuli. It is important to note that in accordance with the construct definition adopted in this dissertation, the COO cue is simply identified as “Italian (German)” thus avoiding any potentially confounding reference to the specific country of manufacturing, design or brand origin of the target product.

### **Dependent Variable Measures**

All dependent and moderator variables, with the exception of the open-ended cognitive/affective responses at the end of the questionnaire, were assessed on seven-point scales. Higher numbers indicate more positive evaluations (see Appendix 1).

### *Product Evaluations*

Respondents evaluated the target product on the following five-item semantic differential scale: “unfavorable” versus “favorable,” “negative” versus “positive,” “bad” versus “good,” “unsatisfactory” versus “satisfactory” and “unattractive” versus “attractive.” The first three items were adopted from the Gurhan-Canli and Maheswaran (2000) COO study. The fourth item was adopted from the Hui and Zhou (2003) COO study, while the fifth item was adopted from the Pham (1998) consumer judgment study. These five items were averaged to form a product evaluation index ( $\alpha = 0.92$  with corrected item-total correlations ranging between 0.66 and 0.77). In addition, a principal components analysis supported the unidimensionality of this measure, with all five items significantly loading on a single-factor structure while also featuring high correlations. Thus, all five items were used in the analysis.

In addition, a single-item measure of the subjects’ purchase intentions toward the target product (“would definitely not consider buying it,” versus “would definitely consider buying it”) was included in the survey. This item was also adopted from the Gurhan-Canli and Maheswaran (2000) study. Although there is no hypothesized effect of national stereotypes on purchase intentions directly, this measure will allow to test whether there is an indirect effect through product evaluation as a predictor variable.

### *Cognitive/Affective Responses*

In order to aid in the interpretation of the quantitative results, respondents were asked to list their thoughts and/or feelings while they read the advertisement on the following three open-ended (fill-in) questions, positioned at the end of the questionnaire: “What thoughts/feelings passed through your mind when you saw this advertisement?” and

“In your own words, what are the main reasons for someone to buy this product?” and lastly, “What are your thoughts/feelings about this country?” These questions were also modeled after the Gurhan-Canli and Maheswaran (2000) study.

## **Moderator Variable Measures**

### *Country-Product Familiarity*

Following the definition offered on Page 47, subjects’ familiarity with the country of origin’s products was assessed by the following three-item Likert scale: “I am quite familiar with Italian (German) products,” “I know a lot about Italian (German) products” and “I own/have owned Italian (German) products.” The first two items were adopted from the Batra et al. (2000) COO study and the third item from the COO study by Han (1989). These three items were averaged to form a country-product familiarity index ( $\alpha = 0.91$  with corrected item-total correlations ranging between 0.75 and 0.87). In addition, a principal components analysis supported the unidimensionality of this measure, with all three items significantly loading on a single-factor structure while featuring high correlations.

### *Involvement*

Subjects’ personal involvement with the target product was assessed by the twenty-item semantic differential scale psychometrically developed by Zaichkowsky (1985). As originally developed, the scale was assumed to be unidimensional. The scale items were “unimportant/important,” “of no concern/of concern to me,” “irrelevant/relevant,” “means nothing to me/means a lot to me,” “useless/useful,” “worthless/valuable,” “trivial/fundamental,” “not beneficial/beneficial,” “doesn’t

matter/matters to me,” “uninterested/interested,” “insignificant/significant,” “superfluous/vital,” “boring/interesting,” “unexciting/exciting,” “unappealing/appealing,” “mundane/fascinating,” “nonessential/essential,” “undesirable/desirable,” “unwanted/wanted” and “not needed/needed”. These twenty items were averaged to form an involvement index ( $\alpha = 0.95$ ). A principal components analysis however, did not support the unidimensionality of this measure, in fact producing a structure consisting of four factors. This finding is consistent with alternative conceptualizations of the involvement construct in the consumer behavior literature that argue that involvement is in fact a multidimensional construct (e.g. McQuarrie and Munson 1986).

### **Independent Variable Manipulation Measures**

#### *National Stereotype Dimensionality*

National stereotype dimensionality (perceived warmth versus perceived competence) was assessed by three manipulation measures.

The first manipulation measure consisted of two six-item semantic differential scales measuring perceived competence and perceived warmth beliefs adopted from the Fiske et al. (2002) study. Respondents were asked: “how would you rate the Italian (German) people on the following dimensions?” Subjects were instructed to make the ratings using 7-point scales anchored with “not much” versus “a lot.” The perceived competence and perceived warmth scale items were scrambled.

The perceived competence dimension scale consisted of the following six items: “competent,” “confident,” “capable,” “efficient,” “intelligent” and “skillful”. These six items were averaged to form a perceived competence dimension index ( $\alpha = 0.93$  with

corrected item-total correlations ranging between 0.72 and 0.83).

The perceived warmth dimension scale consisted of the following six items: “good-natured,” “well-intentioned,” “warm,” “trustworthy,” “sincere” and “friendly.” These six items were averaged to form a perceived warmth dimension index ( $\alpha = 0.87$  with corrected item-total correlations ranging between 0.60 and 0.77).

Principal components analysis showed the bi-dimensionality of the combined and scrambled national stereotype dimension measure. The empirical tests of adequacy for component analysis yielded a satisfactory measure of sampling adequacy ( $MSA = 0.884$ ) and a significant overall correlation matrix (Bartlett test  $p = 0.0001$ ). It should be noted however that although a two-factor structure emerged, the items of “trustworthy” and “well-intentioned” loaded highly on both factors (see Table 2). This exploratory finding is hardly surprising, given that past research in consumer behavior has exhibited the construct of trust to be bi-dimensional itself. In fact, a study by Garbarino and Lee (2003) found “benevolence trust” and “competence trust” to be two separate dimensions. It should be noted that the principal components analysis results are particularly encouraging since the present study is the first in the consumer behavior and country of origin literatures to adopt the Fiske et al. (2002) scales as measures of the dimensionality of the national stereotypes construct. Nevertheless, a complete validation and replication study might be warranted in order to properly determine the scales’ psychometric properties.

As an additional check, the second manipulation measure consisted of the respondents’ rating of the Italian (German) people on the single items of “competent” (for the perceived competence dimension) and “warm” (for the perceived warmth dimension).

Finally as a third manipulation check, a fill-in question was included near the end of

the survey asking subjects to recall the country of origin of the target product.

### *Product Dimensionality*

Product dimensionality (hedonic versus utilitarian) was assessed by two separate manipulation measures.

The first check manipulation check consisted of the subjects' consecutively rating the target product as "not utilitarian" versus "utilitarian" and "not hedonic" versus "hedonic" after reading the following two definitions: "utilitarian products are mainly motivated by goal-oriented consumption" and "hedonic products are mainly motivated by pleasure-oriented consumption." These single-item measures of the hedonic and utilitarian dimensions were adopted from Strahilevitz and Myers (1998) and have been the most widely tested in the consumer behavior literature (Okada 2005).

The second manipulation check measure consisted of the two five-item semantic differential scales means measuring hedonic and utilitarian product attitudes psychometrically developed by Voss et al. (2003). To the best of the author's knowledge at the time of writing this dissertation, this is the first time since their initial publication that the Voss et al. (2003) scales are replicated as manipulation checks of the hedonic versus utilitarian product dimensionality in the consumer behavior literature.

Respondents were asked to rate the target product in terms of the scrambled hedonic and utilitarian scale items. The hedonic dimension scale consisted of the following five items: "not fun/fun," "dull/exciting," "not delightful/delightful," "not thrilling/thrilling" and "unenjoyable/enjoyable." These five items were averaged to form a hedonic dimension index ( $\alpha = 0.94$  with corrected item-total correlations ranging between 0.81 and 0.90).

The utilitarian dimension scale consisted of the following five items: “ineffective/effective,” “unhelpful/helpful,” “not functional/functional,” “unnecessary/necessary” and “impractical/practical.” These five items were averaged to form a utilitarian dimension index ( $\alpha = 0.87$  with corrected item-total correlations ranging between 0.66 and 0.77).

Principal components analysis supported the bi-dimensionality of the combined and scrambled product dimension measure. The empirical tests of adequacy for component analysis yielded a satisfactory measure of sampling adequacy (MSA = 0.914) and a significant overall correlation matrix (Bartlett test  $p = 0.0001$ ). It should be noted however that although a two-factor structure emerged, the items of “effective,” “helpful” and “functional” loaded highly on both factors (see Table 3). This exploratory finding is in line with the difficulty of capturing both dimensions with a valid and reliable measurement instrument that is cited in Voss et al.’s (2003) literature review section, as primarily manifested by somewhat inconsistent factor loadings in replications of previously developed scales. It should be noted that the present study is the first in the consumer behavior and country of origin literatures to adopt the recently developed Voss et al. (2003) hedonic and utilitarian scales as measures of product dimensionality and therefore, further testing and replication may be warranted.

### **Covariate Variable Measures**

#### *Product Familiarity*

The following two-item Likert scale was included in the survey: “I am quite familiar with bicycles” and “I know a lot about bicycles.” These items mirrored the first

two items of the country-product familiarity scale that were adopted from the Batra et al. (2000) study, while applying it to the relevant context of the specific product category employed in the study. These items were averaged to form a product familiarity index ( $r = 0.80$ ).

A one-item Likert scale (“I am quite familiar with Italian (German) bicycles. If so, please fill-in which brand”) was also included in the survey to control for the potential confound of subjects’ brand familiarity with Italian or German bicycles.

#### *Demographics.*

As previously discussed in the subjects and study design section, participants reported their gender, age and nationality/ethnicity.

## **CHAPTER 6: RESULTS**

The previous chapter outlined the experimental design methodology employed to test the research hypotheses. This chapter presents the empirical results starting with the manipulation checks in the first section. The second section presents the results of the initial ANCOVA (analysis of covariance) on the product familiarity variable, and given the observed confirmation of its significant covariate effect, product familiarity is included as a covariate in the subsequent ANCOVA analyses.

The third section presents the results of the effects of the two independent variables of national stereotype dimensionality and product dimensionality and of their interaction in the between-subjects full factorial ANCOVA. The fourth section presents the results of the effects of the moderator variables of country-product familiarity and involvement. The final section details the results of the tests of the assumptions of ANOVA.

### **Manipulation Checks**

#### *National Stereotype Dimensionality*

In this experiment, Italy and Germany were the intended operationalizations (lower level of abstraction) of the high warmth and high competence levels of the national stereotype dimensionality (higher level of abstraction) respectively.

Table 4 shows the descriptive statistics and Table 5 exhibits the results of the ANOVA pertaining to the national stereotype dimensionality manipulation checks.

As planned, subjects in the Italian origin treatment attributed significantly higher scores than participants in the German origin condition on the single-item measure of warmth

( $M_{\text{italian}} = 4.97$  versus  $M_{\text{german}} = 4.07$ ,  $F_{(1,122)} = 13.66$ ,  $p = 0.0001$ ) as well as on the 6-item perceived warmth scale mean ( $M_{\text{italian}} = 4.75$  versus  $M_{\text{german}} = 4.43$ ,  $F_{(1,122)} = 3.28$ ,  $p = 0.073$ ). On the other hand, subjects in the German origin condition attributed significantly higher scores than participants in the Italian origin condition on the single-item measure of competence ( $M_{\text{german}} = 5.05$  versus  $M_{\text{italian}} = 4.53$ ,  $F_{(1,122)} = 4.73$ ,  $p = 0.032$ ) as well as on the 6-item perceived competence scale mean ( $M_{\text{german}} = 5.09$  versus  $M_{\text{italian}} = 4.69$ ,  $F_{(1,122)} = 3.88$ ,  $p = 0.051$ ). Finally, all but three of the respondents correctly recalled the country of origin featured in the treatment.

Given the success of these manipulation checks, in this chapter the findings pertaining to the “Italian” operationalization (lower level of abstraction) are hence labeled to represent the “(high) perceived warmth” level and those of the “German” one to represent the “(high) perceived competence” level of the national stereotype dimensionality factor (higher level of abstraction).

### *Product dimensionality*

Table 6 shows the descriptive statistics and Table 7 exhibits the results of the ANOVA pertaining to the product dimensionality manipulation checks.

As intended, respondents in the hedonic condition ascribed significantly higher scores than participants in the utilitarian condition on the single-item hedonic measure ( $M_{\text{hedonic condition}} = 5.54$  versus  $M_{\text{utilitarian condition}} = 4.27$ ,  $F_{(1,122)} = 22.37$ ,  $p < 0.0001$ ) as well as on the 5-item hedonic scale mean ( $M_{\text{hedonic condition}} = 4.50$  versus  $M_{\text{utilitarian condition}} = 3.33$ ,  $F_{(1,122)} = 20.83$ ,  $p = 0.0001$ ). On the other hand, subjects in the utilitarian condition ascribed significantly higher scores than participants in the hedonic condition on the single-item utilitarian measure ( $M_{\text{utilitarian condition}} = 4.43$  versus  $M_{\text{hedonic condition}} = 3.79$ ,  $F_{(1,122)} = 4.71$ ,  $p =$

0.032) but not on the 5-item utilitarian scale mean ( $M_{\text{hedonic condition}} = 4.30$  versus  $M_{\text{utilitarian condition}} = 3.89$ ,  $F_{(1,122)} = 3.44$ ,  $p = 0.066$ ).

Given the overall success of the first (single-item measures that have been the most commonly applied in previous consumer behavior studies) manipulation checks as well as the partial confirmation offered by the second (5-item measures) manipulation checks, in this chapter the findings pertaining to the “utilitarian condition” operationalization are hence labeled to represent the “(high) utilitarian” level and those of the “hedonic condition” to represent the “(high) hedonic” level of the product dimensionality factor. In summary, the manipulations checks for the study’s experimental operationalizations of both independent factor conditions performed well.

## **Effects of Covariate Variables**

### *Product familiarity*

A preliminary ANCOVA (analysis of covariance) was run first, and found a significant covariate effect for product familiarity ( $F_{(1,122)} = 3.85$ ,  $p = 0.052$ ). Subsequent analysis found a marginally significant interaction between product familiarity and national stereotype dimensionality ( $F_{(2,122)} = 2.65$ ,  $p = 0.08$ ). Since the interaction of national stereotype dimensionality with product familiarity as a continuous variable was found to be marginally significant, a further test for interaction based on product familiarity as a discrete variable (following a median-split) was conducted and found not significant ( $F_{(2,122)} = 1.54$ ,  $p = 0.22$ ).

For these reasons, product familiarity was included as a significant covariate (and not as a moderator variable) in the subsequent ANCOVAs. It is noted that the inclusion of

product familiarity as a significant covariate simply turns the ANOVA (analysis of variance) into an ANCOVA (analysis of covariance) that accounts for the covariate effect of product familiarity while otherwise preserving the same statistical tests and assumptions of ANOVA for the effects of the independent variables on the dependent variable.

As a comparison of Table 10 (ANCOVA with product familiarity included) and Table 11 (ANOVA with product familiarity not included) shows, the inclusion of product familiarity as a covariate improved the overall model's *Adjusted R squared* from 0.12 to 0.14. The comparison of these Tables further shows that the ANCOVA results in slightly (but not significantly) different main effects and a marginal improvement in the significance of the crucial interaction of national stereotype dimensionality with product dimensionality (from  $p = 0.063$  in Table 11 to  $p = 0.055$  in Table 10) than if product familiarity was not included as a covariate.

### *Demographics*

As anticipated, no differential effects were observed on age ( $p = 0.68$ ), gender ( $p = 0.77$ ) and national identity ( $p = 0.66$ ) as covariates, and they were all excluded from further analyses.

### **Effects of National Stereotype Dimensionality and Product Dimensionality**

The target product evaluations were analyzed using a 2 (National stereotype dimensionality: perceived warmth or perceived competence) x 2 (Product dimensionality: hedonic or utilitarian) between-subjects full-factorial ANCOVA, with the above two categorical independent variables, a single interval dependent variable (product evaluation) and a single interval covariate variable (product familiarity). Table 8 shows the

cell sizes of the four between-subjects experimental conditions. The analysis employed the SPSS (11.5) General Linear Model (GLM) procedure.

As shown in Table 10, the full factorial ANCOVA on the product evaluation index yielded significant main effects for both the national stereotype dimensionality ( $F_{(1, 122)} = 6.73, p = 0.011$ ) as well as the product dimensionality ( $F_{(1, 122)} = 9.60, p = 0.002$ ) independent variables.

Specifically, the descriptive statistics show that for the perceived warmth versus perceived competence dimension conditions the mean values for the dependent variable of product evaluation were 4.23 versus 4.77 respectively (see Table 9). That is, it was found (post-hoc, no hypothesized effect) that when perceived competence was high, subjects evaluated the target product more highly. This interesting finding will be further discussed in the next chapter.

Furthermore, the descriptive statistics show that for the hedonic versus utilitarian dimension conditions the mean values for the dependent variable were 4.81 versus 4.17 respectively (see Table 9). That is, it was found (post-hoc, no hypothesized effect) that respondents evaluated the target product more highly in response to the hedonic condition. This finding will be further discussed in the next chapter.

In overall support of hypothesis 1, a significant interaction of product dimension with national stereotype dimension ( $F_{(2, 122)} = 3.76, p = 0.055$ ) was found (see Table 10). In other words, the effect of the product dimension on evaluation is modified by whether the national stereotype is of perceived competence or warmth. A significant interaction indicates that the effect of one variable differs depending on the level of the other variable. The non-parallel lines of the effects of the warmth and competence dimensions visually

indicate this significant interaction effect (see Figure 3).

In order to ascertain whether product dimension has an effect at both levels of the national stereotype dimension, simple effects tests among the means were conducted (see Table 12). The rationale for testing simple effects is to know at what levels of the national stereotype dimension variable, the product dimension variable has a significant effect. It was revealed that when the product dimension was utilitarian, participants evaluated the target product more favorably in response to the perceived competence condition ( $M_{\text{competence}} = 4.64, t = 3.17, p = 0.002$  and  $M_{\text{warmth}} = 3.69, t = -3.17, p = 0.002$ ). That is, when subjects were exposed to a utilitarian description of the bike, product evaluation was significantly higher for the subjects exposed to the German origin (high perceived competence) than for the subjects who were exposed to the Italian origin (high perceived warmth). This finding supports the first simple effect proposed in hypothesis 1, which predicted that a greater level of perceived competence leads to more favorable evaluations of utilitarian products.

On the other hand, when the product dimension was hedonic, there were no significant simple effects on product evaluation for either perceived warmth ( $M_{\text{warmth}} = 4.73, t = 0.28, p = 0.77$ ) nor perceived competence ( $M_{\text{competence}} = 4.89, t = 0.84, p = 0.40$ ). That is, when subjects were exposed to a hedonic description of the bike, product evaluations in response to both the perceived warmth (Italian origin) and perceived competence (German origin) conditions were almost equal. This result does not support the second simple effect in hypothesis 1, which predicted that a greater level of perceived warmth leads to more favorable evaluations of hedonic products.

## Effects of Moderator Variables

### *Country-Product Familiarity*

In order to test hypothesis 2, the statistical analysis must measure and test the differential effect of the independent national stereotype dimensionality variable as a function of the moderator country-product familiarity variable. First, an ANCOVA was run on the continuous country-product familiarity variable as a covariate in the model, and its interaction with national stereotype dimensionality was found significant ( $F_{(2,122)} = 3.86, p = 0.024$ ).

Since the interaction with country-product familiarity as a continuous variable was significant, a test for interaction based on country-product familiarity as a discrete variable (following a median-split) can be conducted. With the median-split method, the resulting “NCountry-Product Familiarity” variable is discrete, as is the independent variable of national stereotype dimensionality. In accordance with the methodology recommended by Baron and Kenny (1986), an ANOVA is the appropriate test of moderation and more explicitly, “moderation is indicated by an interaction.” The subjects’ mean ratings on the country-product familiarity index were used to classify them into two-groups: the high-familiarity group consisted of respondents whose scores were above the country-product familiarity median and the low-familiarity group was made up of respondents whose scores were below the median. An ANOVA test of the interaction of “NCountry-product familiarity” with national stereotype dimensionality was only marginally significant ( $F_{(2,122)} = 2.70, p = 0.071$ ).

A visual inspection of the means plot (see Figure 4) showed that the lines of the effect of the two levels of “NCountry-product familiarity” (level 1= low and level 2= high)

on the two levels of national stereotype dimensionality (warmth and competence) were virtually parallel, suggesting a main, rather than an interaction, effect for the NCountry-product familiarity variable.

As shown in Table 13, the “NCountry-product familiarity” resulting from the median split of the country-product familiarity continuous variable was subsequently tested as a third independent factor, and this main effect was found significant ( $F_{(1, 122)} = 5.11, p = 0.026$ ). The inclusion of “NCountry-product familiarity” in the final ANCOVA model (Table 13) resulted in an increase of the *Adjusted R squared* to 0.16, while preserving the significance levels of the previously reported main and interaction effects. The mean values of evaluation for the low versus high country-product familiarity levels were 4.22 versus 4.79 respectively. That is, subjects who were more familiar with a country’s products evaluated the target product originating in that country more favorably than those that were less familiar. This main effect of “NCountry-product familiarity” is in the positive direction.

In accordance with the parallel lines exhibited in the means plot (Figure 4), the interaction of national stereotype dimensionality with the discrete “NCountry-product familiarity” variable was found not significant ( $F_{(2, 122)} = 0.02, p = 0.885$ ). Hypothesis 2 is therefore not supported. Instead, the empirical evidence suggests that the country-product familiarity variable has a main rather than a moderating effect on product evaluation. A post-hoc alternative explanation for this interesting finding will be discussed in the next chapter.

### *Involvement*

First, an ANCOVA was run on the continuous involvement variable as a covariate

in the model, and its interaction with national stereotype dimensionality was found not significant ( $F_{(2,122)} = 0.06, p = 0.93$ ). Since the interaction with involvement as a continuous variable was not significant, no further testing for interaction based on involvement as a discrete variable (following a median-split) could be conducted. Subsequent interaction tests using one-item to four-item subscales of the 20-item Zaichkowsky measure yielded no significant or marginally significant interactions with national stereotype dimensionality.

As a further probing of the involvement variable data, and given that the utilitarian level of product dimensionality was previously found to significantly effect evaluations between the competence and warmth levels of the national stereotype dimensionality (no simple effects were found for the hedonic level) the overall sample was restricted to the utilitarian condition sub-sample ( $N = 59$ ), and the interactions of national stereotype dimensionality with each of the twenty items in the Zaichkowsky scale as a separate covariate were analyzed. None of the twenty items were found significant, with the relatively better performing individual item being “Interesting” ( $F_{(2,58)} = 1.65, p = 0.20$ ). Finally, a test for interaction based on involvement as a discrete variable (following a median-split) was conducted on the utilitarian sub-sample and was also found not significant ( $F_{(2,58)} = 0.08, p = 0.78$ ). Therefore, hypothesis 3 is not supported.

### **Tests of Assumptions of ANOVA**

#### *Independence*

This assumption was met, as subjects in each sample were randomly and

independently drawn so that an observed value in any one group had no effect or influence on any other groups.

#### *Normality*

Two statistical tests each assessing the level of significance for the differences from a normal distribution were performed on the dependent variable of product evaluation. Both the Shapiro-Wilks ( $p = 0.42$ ) and the modified Kolmogorov-Smirno tests ( $p = 0.20$ ) indicated that the data are normally distributed. Furthermore, a visual inspection of the normal probability plot (graphics test not reported) showed a normal distribution.

#### *Homoscedasticity*

The Levene test ( $p = 0.46$ ) assessing whether the variances of the dependent variable are unequal across the groups indicated that the data is indeed homoscedastic. Furthermore, a visual examination of the residual plot confirmed the presence of homoscedasticity (graphics test not reported).

#### *Linearity*

The graphical examination of the scatterplot identified no nonlinear patterns in the data, thus the linearity assumption was also met (graphics test not reported).

## **CHAPTER 7: GENERAL DISCUSSION**

This last chapter offers a general discussion of the study's results and of their various implications. First, a detailed interpretation of the empirical findings is provided. This includes a discussion of the results' implications for hypothesis testing as well as their post-hoc (interpretation of interesting findings for whom no specific hypotheses were advanced) suggestions. The next sections present the important theoretical contributions of the study. The managerial implications of the dissertation at both the corporate and national level are discussed next. The chapter concludes with sections on the limitations of the study and on directions for future research.

### **Discussion of Empirical Findings**

#### *The National Stereotype Dimensionality/Product Dimensionality Interaction*

Overall, the empirical findings found partial support for hypothesis 1.

Some interesting findings emerged pertaining to the simple effects proposed in hypothesis 1. In support of the first simple effect proposed in hypothesis 1, the findings suggest that when a country is perceived as competent its utilitarian products receive significantly more favorable evaluations. Alternatively articulated, when a nation enjoys high competence perceptions, its utilitarian products are evaluated more highly than utilitarian products from high warmth countries. This is the first time in the COO and consumer behavior literatures that this interaction is empirically demonstrated, adding richness to the understanding of country of origin-based effects on consumer evaluation. This is a finding of great importance, with many conceptual and managerial implications.

On the other hand, the empirical evidence provided no support for the proposed synergistic effect between perceived warmth and the hedonic product dimension (second simple effect presented in hypothesis 1). An alternative explanation for this finding is that since both of the national stereotype dimensions of perceived competence and warmth are cognitive beliefs about the perceived traits of a national group, responses to national stereotype dimensions are unrelated to the hedonic dimension of a product, that has been defined to result from the emotions derived from the experience of using products (Voss et al. 2003). In their article, the authors posit that hedonic attitudes are directly influenced by a consumer's affective involvement, whereas utilitarian attitudes are directly influenced by cognitive involvement.

Given that stereotypes are conceptualized as beliefs about the characteristics and attributes of members of a particular group that allow easier processing of information about those members, it follows that they may in fact have little impact on affective involvement and any subsequent affect-based responses. As national stereotype dimensionality is primarily based on cognition it is conceivable that it has no or little association with the feeling-related hedonic product dimension. On the other hand, Pham (1998) found that consumers' affective reactions only had an impact on their evaluations of products that are typically judged on the basis of hedonic criteria and did not influence their evaluations of products that were generally based on utilitarian dimensions.

It is also plausible that the uniformly high reputation enjoyed by German origin products (considering that Germany is ranked as the second largest exporter in the world and as empirically shown in a number of COO studies such as Gaedeke 1973, for example) simply overwhelmed the hedonic versus utilitarian manipulation employed in the

experiment. This dissertation is the first empirical investigation of the national stereotype dimensionality with product dimensionality interaction. The important findings on the significant simple effect of greater perceived competence on more favorable evaluations of utilitarian products should be the foundation for subsequent research.

### *National Stereotype Dimensionality*

First, the empirical findings reported in the previous chapter found post-hoc support for both the perceived competence and perceived warmth stereotype dimensions having a positive effect on product evaluation. As their level becomes higher, product evaluations become more favorable. The simple presence of national stereotype dimensionality in the form of country of origin cues implanted in the advertisement manipulations resulted in significant differences in their evaluations of the target product. This post-hoc finding confirms the robustness of the COO effect on product evaluation, even in the simultaneous presence of additional product-related information (“multi-cues”).

Furthermore, the dimensionality of the origin country’s associated stereotype was found to have a differential effect on product evaluation. The empirical findings suggest that COO-based product evaluations are more likely to be favorable when the associated national stereotype dimension is perceived competence. Although no specific hypotheses were made regarding the *relative* effect of the two dimensions on product evaluation, this is a theoretically interesting post-hoc finding that is consistent with the Stereotype Contents Model. The SCM postulates that competence stereotypes derive from the perception of a relatively higher socio-economic status and superior competitiveness of the perceived

group (i.e. nation). Implicit in the SCM is the predominance of perceived competence over that of warmth (Lin et al. 2005). Adding empirical support, Fiske et al. (2002) reported that in their cluster analysis the perceived competence dimension differentiated the perceived groups more than the perceived warmth dimension.

In the consumer judgment context, the competitively charged market environment could only accentuate the dominance of competence over warmth. In an increasingly capitalistic global environment, competition among national (or even corporate multi-national, for that matter) groups for economic power and the resultant status becomes increasingly salient to consumers. The resultant respect placed by consumers on achievement, rewards those nations who enjoy a higher level of perceived competence with more favorable product evaluations.

#### *Product Dimensionality*

The empirical findings reported in the previous chapter showed post-hoc support for a main effect of product dimensionality on evaluation. In this study, when the target product was presented in a more hedonic fashion, it received significantly higher consumer evaluations. The underlying reasons for this particular result may be multifaceted.

According to Voss et al. (2003), the peripheral-route processing model predicts a more favorable effect of hedonic attitudes (versus utilitarian attitudes) on product evaluation. As this dissertation study's advertisement stimulus was presented in color versus in black and white, it naturally resulted in a more hedonic product attitude. Assuming that color advertising stimuli are overall more likely to invoke peripheral route processing than non-advertising or non-image stimuli, this study artifact could explain the more favorable evaluation for the hedonic condition in the main study.

Furthermore, the relative effects of product dimensionality would depend on the product category (Voss et al. 2003). It is conceivable that overall, mountain bikes are perceived as relatively more hedonic rather than utilitarian. Consequently, when presented in a hedonic treatment they would be judged more favorably. Different product categories (i.e. more utilitarian relative to mountain bikes) could have elicited a different result.

It should be noted that prior to this dissertation, no study in the published literature has attempted to manipulate the hedonic/utilitarian dimensionality for the same product. The present study makes a valuable contribution to the exploration of product dimensionality, providing a starting point for future research in this area.

#### *Country-Product Familiarity*

Hypothesis 2 proposed a moderating effect of country-product familiarity on the effect of national stereotype dimensionality on evaluations. The empirical findings suggest a more robust main, rather than moderating, effect for the country-product familiarity variable. In this study, it seems that as consumers become more familiar with a country's (Italy or Germany) products they evaluate products originating in those countries more highly.

A plausible explanation for this unexpected main (independent variable) effect is provided by Han's (1989) "summary" construct hypothesis, according to which as consumers become more familiar with a country's products they summarize their beliefs about the country's products (i.e. perceptions of the country's production and marketing strengths and weaknesses), into a "summary country image" construct that incorporates their beliefs about these products' attributes, thus directly affecting their COO-based evaluations of all other products associated with the country while lowering the effect of

national stereotypes about the country's people. According to this summary construct effect, consumers with higher levels of country-product familiarity base their evaluations more on their knowledge of the origin country's product qualities and less on the contents of their national stereotypes. It follows that as consumers become more familiar with a country's products, their level of country-product expertise increasingly influences their national stereotypes contents. Consequently, national stereotype contents increasingly encapsulate perceivers' association with the nation's products.

The significantly higher product evaluation scores for the high country-product familiarity subjects in the study are intuitive, given that both Germany and Italy can be safely assumed to be high product quality and reputation producers and exporters. If on the other hand, the origin countries employed in the study were known as producers of low quality products, high country-product familiarity consumers would be expected to assign significantly lower evaluation scores.

### *Involvement*

Contrary to hypothesis 3, no empirical support was found for involvement as a moderator. The findings show that the level of subjects' involvement had no effect on evaluation whatsoever. There are a number of alternative explanations for this finding. Although the study employed the most commonly used measure of involvement (the full twenty-item scale developed by Zaichkowsky 1985) in the consumer behavior literature, there have been criticisms of the scale's validity as well as alternative conceptualizations of the construct. For example, McQuarrie and Munson (1986) argued that the Zaichkowsky (1985) involvement inventory was contaminated with "attitudinal" variables, offering their own construct and measure instead. Laurent and Kapferer (1985) viewed consumer

involvement as multi-faceted construct along five dimensions, offering their own sixteen-item measure instead. Furthermore, a principal components analysis of the involvement index data in the present study revealed a structure consisting of four components. Perhaps, an alternative operationalization of the involvement construct could have provided empirical support for the hypothesized effect. Another plausible explanation for this finding may be related to the product category chosen for the study. Many of the subjects' cognitive responses revealed a rather low level of involvement with bicycles. Further exploration of the moderating role of involvement is necessary.

### **Theoretical Implications**

This dissertation makes several theoretical contributions to the country of origin literature. Despite the major interest in investigating country of origin-related consumer phenomena, little theory-based research has previously examined the relationship between national stereotypes and COO-based product evaluations.

This dissertation represents an initial effort to apply the Stereotype Content Model's predictions about the dimensions of group stereotypes to the ever-expanding literature of country of origin effects. The SCM is a theoretical advance in the explanation of how stereotype contents are structured and how they may influence behavior such as prejudice and discrimination toward groups (Lin et al. 2005). This dissertation is a ground-breaking theoretical and empirical attempt to extend the pertinence of the SCM to the field of consumer behaviors, such as product judgment.

Moreover, the theoretical framework advanced and tested in this dissertation, substantially extends our understanding of COO-based consumer evaluations of products

by partitioning the contents of national stereotypes and investigating their intricate relationship with product dimensionality. Prior research has assumed that national stereotypes are unidimensional, this dissertation's conceptual framework and empirical findings document that national stereotypes are a multidimensional construct. This study marks a pioneering effort to examine the theoretical relationship between the hedonic and utilitarian product dimensions on the one hand and the national stereotype dimensions of perceived competence and perceived warmth, on the other. In addition, the complex effect of familiarity with a country's products on evaluation is theoretically and empirically explored, adding support to its conceptualization as a "summary" rather than as a "halo" construct (Han 1989, Maheswaran 1994).

In addition, to the best of the author's knowledge of the current literature, this dissertation is the first experimental study to successfully manipulate the dimensionality of the same product. This is an important research advance in our understanding of the hedonic/utilitarian dimensions of product attitudes that adds support to the Voss et al. (2003) conceptualization that attitudes toward all product categories contain a hedonic as well as a utilitarian dimension.

### **Managerial Implications**

The proposed theoretical model and empirical findings have many practical implications for multi-national corporations as well as government and industry efforts to market nations.

#### *Corporate Level*

Multi-national corporations that engage in a high level of global sourcing may

incorporate the findings on the effects of national stereotype dimensions when they choose design or manufacturing locations. A firm that sells hedonic products should choose to locate in nations with higher perceived warmth. Companies that market utilitarian products should select to locate in nations with a higher perceived competence. The applications of the proposed framework range from branding to advertising and product design: firms operating in different national contexts must capitalize on the perceived strengths of the firm's national image as it relates to the particular type of product and consumer characteristics.

In some cases firms may strategically select to communicate an origin country entirely different from their own to overcome the negative associations of their home country by appropriating foreign-sounding brand names that aim to activate more favorable (if false) stereotype dimensions.

#### *National Level*

In an increasingly global environment, nations compete with each other to successfully export their goods and services, attract tourism and foreign investment (Kotler et al. 1997). As a result, nations must position and differentiate themselves in the perceptions of consumers, managers and investors. The consequent strategy of "national branding" aims at cultivating a unique and positive brand image of the nation and its associated symbols (Olins 1999).

The dissertation's framework holds many implications for the marketing and branding strategies of nations, suggesting that nations should project an image of competence or warmth respectively based on their type of products and target markets. The empirical findings suggest that nations should promote their perceived warmth if they are

focusing on exporting hedonic products (i.e. Mexico's recent "I am Mexico" U.S. travel magazine campaign that visually portrayed "Mexico" in the form of strictly female and young models interacting with nature). On the other hand, nations should stress their perceived competence if they specialize in utilitarian products (i.e. Singapore's "Synergy for Success" U.S. business newspaper campaign that visually portrayed its people as highly educated and technologically sophisticated, typically alone and interacting with machines) [Chattalas 1999a]. Interestingly, in the largely hedonic and experientially driven industry of travel services, Singapore Airlines has chosen to depict an image of warmth through the warm and friendly, if not sexist, "Singapore Girl" icon.

As nations diversify their international marketing efforts, they may wish to strategically promote their relatively weaker stereotype dimension. Nations with a high level of perceived competence such as Germany, Singapore and Japan for example, should infuse their national brand with warmth, especially when they are promoting hedonic products. On the other hand, countries that enjoy a high level of perceived warmth such as Greece for instance, should concentrate on projecting an image of competence.

Greece's recent Olympics bid efforts provide an excellent case in point (Chattalas 1999b). During Greece's failed 1996 bid, national promotion efforts stressed its culture and history while largely ignoring to address its low competence perception. Greece's successful 2004 bid was largely due to its balanced promotional messages that stressed both its perceived competence (the privatization of its economy, its European Union membership, its improving infrastructure) as well as its perceived warmth (the friendliness and admittedly, incredible warmth of its people) dimensions. Given that promoting a successful Olympics bid requires utilitarian (technology, infrastructure) as well as hedonic

(cultural and historical) qualities in order to be persuasive, Greece's efforts ultimately succeeded in securing the 2004 Olympics for Athens. The successful hosting of the Athens 2004 Olympics generated a considerable amount of positive publicity for the host nation of Greece. As a result, a recently conducted cross-national public opinion survey found Greece to be perceived as a "modern European country" that organized "technically excellent" Olympic Games with a "human dimension" ([www.Athens2004.com](http://www.Athens2004.com)).

### **Limitations**

This dissertation breaks new ground by exploring the effects of national stereotype dimensionality, and in particular its interaction with the hedonic/utilitarian product dimensionality, on evaluation. Nevertheless, there are some limitations that should be noted and addressed in future research.

The experimental study utilized only two countries and one product category. It will be interesting to examine how the model's predictions fare across a wider range of countries (i.e. less developed versus more developed, and so on) and product categories. The target product (mountain bike) may have elicited a relatively low level of involvement, contributing to the failure to find support for the hypothesized role of involvement as a heuristic. Future research should incorporate stronger manipulations of the involvement construct. The survey instrument did not include any measures of country familiarity or familiarity with a country's culture. This is a rarely measured construct in COO research, but it could have important implications for national stereotype effects. Also, future research should include affective measures as well as measures of the subjects' attitude

toward the advertisement itself. Finally, future research with a non-student population would add to the external validity of the findings.

### **Future Research**

The dissertation holds a number of implications for future research:

This empirical study focused on the role of national stereotype dimensionality from a cognitive perspective. Future research should explore the role of affect (defined to include emotion, mood and possibly, attitudes) on the effects of national stereotype dimensionality.

Future research should also examine the universality of the stereotype dimensions of warmth and competence across various nations and consumer cultures. It would be interesting to empirically test the SCM's assumption of the primacy of the perceived competence dimension across a range of cultural orientations.

The conceptual model should also be expanded to include additional theory-based product types, such as goods versus services, for example.

As globalization grows, an ever-increasing number of hybrid products are sourced in more than one nation. In such cases, it would be worthwhile to investigate the potential interaction effects of multiple national stereotype and their respective dimensions, such as country of brand origin, country of manufacture and country of design, embedded in the same product.

Globalization and the ever-increasing volume of international trade, exposes consumers to a growing amount of information about various nations' products. As consumer familiarity with a nation's products increases, the contents of the associated

national stereotype may become increasingly based on consumer evaluations of that nation's products. It would be interesting to further examine the dynamic nature of the relationship between national stereotypes and COO-based product evaluations over time. Specifically, the longitudinal transition of national stereotype contents from a "halo" to a "summary" construct should be investigated, given Han's (1989) position that consumers constantly summarize product-related information into their national stereotypes. In addition, as nations evolve in their level of economic development and subsequently, level of perceived status and competitive threat, the specific contents of their associated stereotypes may also shift from warm to competent.

Finally, future research should explore the potential effect of alternative conceptualizations of involvement such as, cognitive and affective involvement (Voss et al. 2003) on the effects of national stereotype dimensionality. In addition, the potential moderator effect of related consumer characteristics, such as the need for cognition variable should be explored.

**Table 1:**  
**Selected Literature Review of Country of Origin Effects**

| CONSTRUCT                                          | STUDIES                                                                                                      | MAIN FINDINGS                                                                                                                                                                                                                                                                     |
|----------------------------------------------------|--------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| COO as a single information cue                    | Schooler (1965)<br>Nagashima (1970)                                                                          | COO effects consumer product evaluations.                                                                                                                                                                                                                                         |
| COO as one of multiple information cues            | Johansson et al. (1985)<br>Wall et al. (1991)<br>Peterson and Jolibert (1995)<br>Agrawal and Kamakura (1999) | In the simultaneous presence of multiple information cues (i.e. brand, price, etc.), the COO effect is lowered, due to demand artifacts.                                                                                                                                          |
| Multiple COO cues embedded in one (hybrid) product | A. Han and Terpstra (1988)<br>Tse and Gorn (1993)<br><br>B. Hui and Zhou (2003)<br>Srinivasan et al. (2004)  | When simultaneously presented, the country of manufacturing cue has a larger effect on evaluations than the country of brand origin cue. When simultaneously presented, the country of brand origin cue has a larger effect on evaluations than the country of manufacturing cue. |
| Product Type                                       | A. Kaynak and Cavusgil (1983)<br>Roth and Romeo (1992)<br>B. LeClerc et al. (1994)                           | COO effects on evaluation vary by product type.<br><br>Products with a French association are perceived to be more hedonic than products that lack this association.                                                                                                              |
| Country-Product Familiarity                        | Han (1989)                                                                                                   | COO operates as a “halo” or “summary” construct, depending on familiarity.                                                                                                                                                                                                        |
| Longitudinal Effect of COO                         | Nagashima (1970, 1977)                                                                                       | COO effects are dynamic and may change over time.                                                                                                                                                                                                                                 |
| Measurement of COO Effects                         | Nagashima (1970)                                                                                             | Most measures of COO are based on the Nagashima (1970) scale, whose validity and reliability is questionable.                                                                                                                                                                     |
| National and Country Stereotypes                   | Heslop and Papadopoulos (1993)<br><br>Martin and Eroglu (1993)                                               | The cognitive, affective and normative factors of national stereotypes effect COO-based product evaluations.<br>The political, economic and technological factors of country stereotypes effect COO-based product evaluations.                                                    |

**Table 2: Rotated Component Matrix of National Stereotype Dimensionality (a)**

| Scale Item       | Component<br>Item Loadings |     |
|------------------|----------------------------|-----|
|                  | 1                          | 2   |
| Competent        | .85                        | .14 |
| Good-natured     | .35                        | .71 |
| Confident        | .74                        | .26 |
| Well-intentioned | .60                        | .50 |
| Capable          | .86                        | .19 |
| Warm             | .04                        | .89 |
| Efficient        | .86                        | .12 |
| Trustworthy      | .63                        | .43 |
| Intelligent      | .85                        | .20 |
| Sincere          | .36                        | .76 |
| Skillful         | .84                        | .07 |
| Friendly         | .04                        | .86 |

Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.  
 (a) Rotation converged in 3 iterations.

**Table 3: Rotated Component Matrix of Product Dimensionality (a)**

| Scale Item | Component Item Loadings |     |
|------------|-------------------------|-----|
|            | 1                       | 2   |
| Effective  | .73                     | .34 |
| Fun        | .87                     | .23 |
| Helpful    | .66                     | .46 |
| Exciting   | .88                     | .22 |
| Delightful | .89                     | .27 |
| Functional | .50                     | .69 |
| Thrilling  | .81                     | .30 |
| Necessary  | .23                     | .83 |
| Enjoyable  | .73                     | .45 |
| Practical  | .23                     | .87 |

Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.

(a) Rotation converged in 3 iterations.

**Table 4: Descriptive Statistics of National Stereotype Dimensionality Manipulation Checks**

| Measure                               | Condition | N   | Mean | Std. Deviation |
|---------------------------------------|-----------|-----|------|----------------|
| Perc. Competence<br>6-item Scale Mean | Italian   | 62  | 4.69 | 1.06           |
|                                       | German    | 61  | 5.09 | 1.16           |
|                                       | Total     | 123 | 4.89 | 1.13           |
| Perc. Warmth<br>6-item Scale Mean     | Italian   | 62  | 4.75 | 1.02           |
|                                       | German    | 61  | 4.43 | 0.91           |
|                                       | Total     | 123 | 4.59 | 0.98           |
| Perc. Competence<br>1-item Scale      | Italian   | 62  | 4.53 | 1.23           |
|                                       | German    | 61  | 5.05 | 1.39           |
|                                       | Total     | 123 | 4.79 | 1.33           |
| Perc. Warmth<br>1-item Scale          | Italian   | 62  | 4.97 | 1.49           |
|                                       | German    | 61  | 4.07 | 1.19           |
|                                       | Total     | 123 | 4.52 | 1.42           |

**Table 5: ANOVA of National Stereotype Dimensionality Manipulation Checks**

| Measure                                  | Test           | Sum of Squares | df  | Mean Square | F     | Sig.   |
|------------------------------------------|----------------|----------------|-----|-------------|-------|--------|
| Perc. Competence<br>6-item Scale<br>Mean | Between Groups | 4.83           | 1   | 4.83        | 3.88  | 0.051  |
|                                          | Within Groups  | 151.04         | 121 | 1.24        |       |        |
|                                          | Total          | 155.87         | 122 |             |       |        |
| Perc. Warmth<br>6-item Scale<br>Mean     | Between Groups | 3.11           | 1   | 3.11        | 3.28  | 0.073  |
|                                          | Within Groups  | 114.84         | 121 | 0.94        |       |        |
|                                          | Total          | 117.95         | 122 |             |       |        |
| Perc. Competence<br>1-item Scale         | Between Groups | 8.21           | 1   | 8.21        | 4.73  | 0.032  |
|                                          | Within Groups  | 210.28         | 121 | 1.73        |       |        |
|                                          | Total          | 218.50         | 122 |             |       |        |
| Perc. Warmth<br>1-item Scale             | Between Groups | 25.02          | 1   | 25.02       | 13.66 | 0.0001 |
|                                          | Within Groups  | 221.67         | 121 | 1.832       |       |        |
|                                          | Total          | 246.69         | 122 |             |       |        |

**Table 6: Descriptive Statistics of Product Dimensionality Manipulation Checks**

| Measure                             | Condition   | N   | Mean | Std.<br>Deviation |
|-------------------------------------|-------------|-----|------|-------------------|
| Hedonic<br>5-item Scale<br>Mean     | Hedonic     | 63  | 4.50 | 1.38              |
| Hedonic<br>5-item Scale<br>Mean     | Utilitarian | 60  | 3.33 | 1.45              |
| Hedonic<br>5-item Scale<br>Mean     | Total       | 123 | 3.92 | 1.53              |
| Utilitarian<br>5-item Scale<br>Mean | Hedonic     | 63  | 4.30 | 1.10              |
| Utilitarian<br>5-item Scale<br>Mean | Utilitarian | 60  | 3.89 | 1.36              |
| Utilitarian<br>5-item Scale<br>Mean | Total       | 123 | 4.10 | 1.25              |
| Hedonic<br>Single-Item              | Hedonic     | 63  | 5.54 | 1.17              |
| Hedonic<br>Single-Item              | Utilitarian | 60  | 4.27 | 1.76              |
| Hedonic<br>Single-Item              | Total       | 123 | 4.92 | 1.61              |
| Utilitarian<br>Single-Item          | Hedonic     | 63  | 3.79 | 1.56              |
| Utilitarian<br>Single-Item          | Utilitarian | 60  | 4.43 | 1.70              |
| Utilitarian<br>Single-Item          | Total       | 123 | 4.11 | 1.65              |

**Table 7: ANOVA of Product Dimensionality Manipulation Checks**

| Measure                             | Test              | Sum of Squares | df  | Mean Square | F     | Sig.   |
|-------------------------------------|-------------------|----------------|-----|-------------|-------|--------|
| Hedonic<br>5-item Scale<br>Mean     | Between<br>Groups | 41.96          | 1   | 41.96       | 20.83 | 0.0001 |
|                                     | Within<br>Groups  | 243.74         | 121 | 2.01        |       |        |
|                                     | Total             | 285.71         | 122 |             |       |        |
| Utilitarian<br>5-item Scale<br>Mean | Between<br>Groups | 5.28           | 1   | 5.28        | 3.44  | 0.066  |
|                                     | Within<br>Groups  | 186.02         | 121 | 1.53        |       |        |
|                                     | Total             | 191.30         | 122 |             |       |        |
| Hedonic<br>Single-Item              | Between<br>Groups | 49.80          | 1   | 49.80       | 22.37 | 0.0001 |
|                                     | Within<br>Groups  | 269.38         | 121 | 2.22        |       |        |
|                                     | Total             | 319.18         | 122 |             |       |        |
| Utilitarian<br>Single-Item          | Between<br>Groups | 12.57          | 1   | 12.57       | 4.71  | 0.032  |
|                                     | Within<br>Groups  | 323.05         | 121 | 2.67        |       |        |
|                                     | Total             | 335.62         | 122 |             |       |        |

**Table 8: Between-Subjects Factors**

| Factor                              | Level                   | N  |
|-------------------------------------|-------------------------|----|
| National<br>Stereotype<br>Dimension | Perceived<br>Warmth     | 62 |
|                                     | Perceived<br>Competence | 61 |
| Product<br>Dimension                | Hedonic                 | 63 |
|                                     | Utilitarian             | 60 |

**Table 9: Descriptive Statistics of Between-Subjects Effects**

Dependent Variable: Product Evaluation

| National Stereotype Dimension | Product Dimension | Mean | Std. Deviation | N   |
|-------------------------------|-------------------|------|----------------|-----|
| Perceived Warmth              | Hedonic           | 4.73 | 1.24           | 32  |
|                               | Utilitarian       | 3.69 | 1.13           | 30  |
|                               | Total             | 4.23 | 1.29           | 62  |
| Perceived Competence          | Hedonic           | 4.89 | .94            | 31  |
|                               | Utilitarian       | 4.64 | 1.30           | 30  |
|                               | Total             | 4.77 | 1.13           | 61  |
| Total                         | Hedonic           | 4.81 | 1.09           | 63  |
|                               | Utilitarian       | 4.17 | 1.30           | 60  |
|                               | Total             | 4.50 | 1.24           | 123 |

**Table 10: Tests of Between-Subjects Effects (ANCOVA Model)**

Dependent Variable: Product Evaluation

| Source                                                  | Type III<br>Sum of<br>Squares | df  | Mean Square | F      | Sig. |
|---------------------------------------------------------|-------------------------------|-----|-------------|--------|------|
| Corrected Model                                         | 31.84                         | 4   | 7.96        | 6.02   | .000 |
| Intercept                                               | 250.15                        | 1   | 250.15      | 189.37 | .000 |
| National Stereotype<br>Dimension                        | 8.89                          | 1   | 8.89        | 6.73   | .011 |
| Product Dimension                                       | 12.68                         | 1   | 12.68       | 9.60   | .002 |
| National Stereotype<br>Dimension * Product<br>Dimension | 4.96                          | 1   | 4.96        | 3.76   | .055 |
| Product Familiarity<br>(Covariate)                      | 5.08                          | 1   | 5.08        | 3.85   | .052 |
| Error                                                   | 155.86                        | 118 | 1.32        |        |      |
| Total                                                   | 2677.56                       | 123 |             |        |      |
| Corrected Total                                         | 187.71                        | 122 |             |        |      |

Adjusted R Squared = .14

**Table 11: Tests of Between-Subjects Effects (ANOVA Model)**

Dependent Variable: Product Evaluation

| Source                                                  | Type III<br>Sum of<br>Squares | df  | Mean Square | F       | Sig. |
|---------------------------------------------------------|-------------------------------|-----|-------------|---------|------|
| Corrected Model                                         | 26.75                         | 3   | 8.91        | 6.59    | .000 |
| Intercept                                               | 2480.12                       | 1   | 2480.12     | 1833.68 | .000 |
| National Stereotype<br>Dimension                        | 9.61                          | 1   | 9.61        | 7.11    | .009 |
| Product Dimension                                       | 12.74                         | 1   | 12.74       | 9.42    | .003 |
| National Stereotype<br>Dimension * Product<br>Dimension | 4.76                          | 1   | 4.76        | 3.52    | .063 |
| Error                                                   | 160.95                        | 119 | 1.35        |         |      |
| Total                                                   | 2677.56                       | 123 |             |         |      |
| Corrected Total                                         | 187.71                        | 122 |             |         |      |

Adjusted R Squared = .12

**Table 12: Parameter Estimates (Tests of Simple Effects)**

Dependent Variable: Product Evaluation

| Parameter                                | B    | Std. Error | t     | Sig. |
|------------------------------------------|------|------------|-------|------|
| Intercept                                | 4.64 | .21        | 21.88 | .000 |
| [Perc. Warmth]<br>* [Hedonic]            | .08  | .29        | .28   | .775 |
| [Perc. Warmth]<br>* [Utilitarian]        | -.95 | .30        | -3.17 | .002 |
| [Perc.<br>Competence] *<br>[Hedonic]     | .25  | .29        | .84   | .403 |
| [Perc.<br>Competence] *<br>[Utilitarian] | .95  | .30        | 3.17  | .002 |

**Table 13: Tests of Between-Subjects Effects**  
**(Final ANCOVA Model Includes “NCountry-Product Familiarity” as the Third Independent**  
**Factor and Product Familiarity as a Covariate)**

Dependent Variable: Product Evaluation

| Source                                                                | Type III<br>Sum of<br>Squares | df  | Mean Square | F      | Sig. |
|-----------------------------------------------------------------------|-------------------------------|-----|-------------|--------|------|
| Corrected Model                                                       | 38.44                         | 6   | 6.40        | 4.98   | .000 |
| Intercept                                                             | 250.72                        | 1   | 250.72      | 194.84 | .000 |
| National Stereotype<br>Dimension                                      | 7.28                          | 1   | 7.28        | 5.66   | .019 |
| Product Dimension                                                     | 11.93                         | 1   | 11.93       | 9.27   | .003 |
| NCountry-Product<br>Familiarity                                       | 6.57                          | 1   | 6.57        | 5.11   | .026 |
| National Stereotype<br>Dimension * Product<br>Dimension               | 4.67                          | 1   | 4.67        | 3.63   | .059 |
| National Stereotype<br>Dimension *<br>NCountry-Product<br>Familiarity | .02                           | 1   | .02         | .02    | .885 |
| Product Familiarity<br>(covariate)                                    | 4.72                          | 1   | 4.72        | 3.67   | .058 |
| Error                                                                 | 149.26                        | 116 | 1.28        |        |      |
| Total                                                                 | 2677.56                       | 123 |             |        |      |
| Corrected Total                                                       | 187.71                        | 122 |             |        |      |

Adjusted R Squared = .16

**Figure 1: Country of Origin (COO) Effects:**

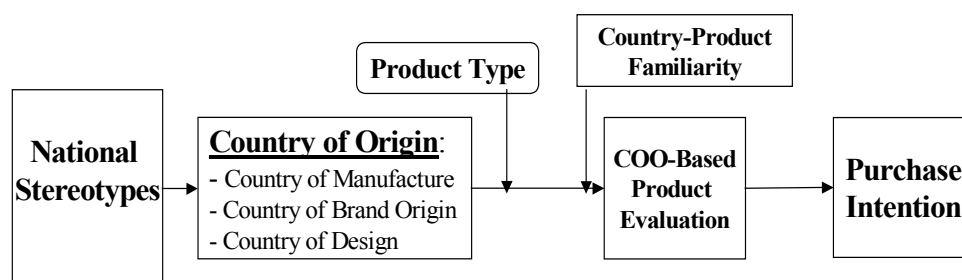


**Figure 2: Proposed Theoretical Framework & Hypotheses**

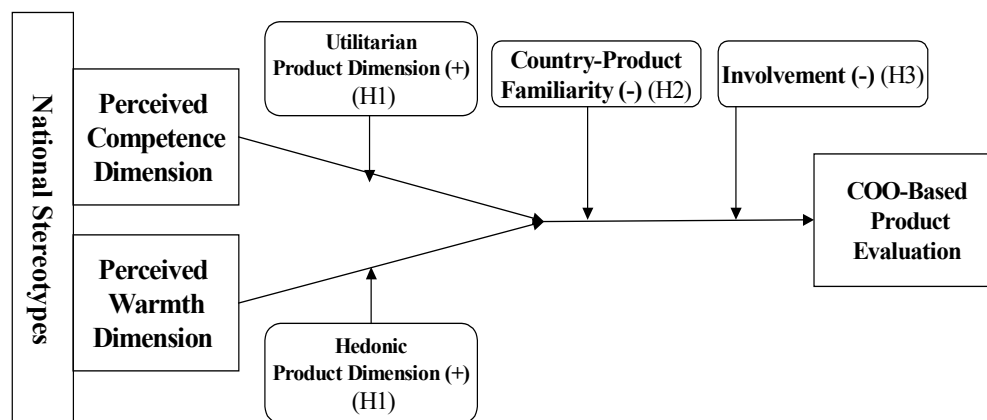


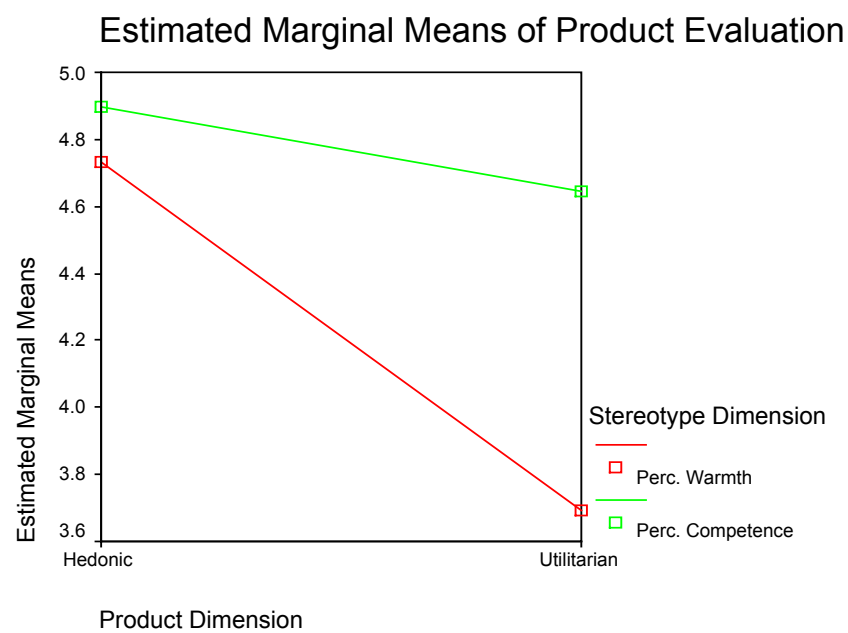
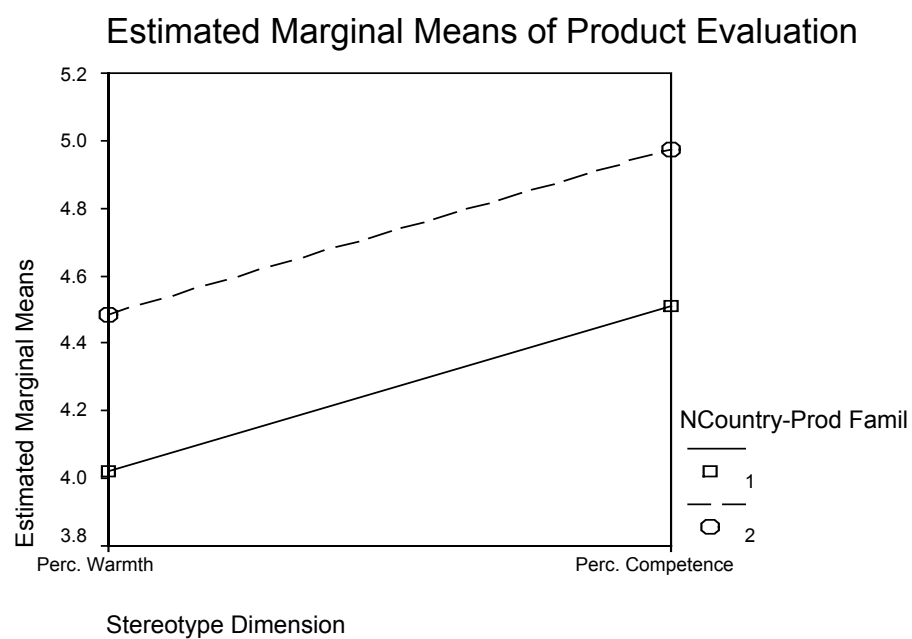
**Figure 3: Profile Plot of Nat. Stereotype Dimension with Product Dimension Interaction**

**Figure 4: Profile Plot of the Effects of the Two Levels of “NCountry-Product Familiarity” (Discrete Variable) on Product Evaluation**



## Appendix 1: Study Questionnaire

### CONSUMER ATTITUDES STUDY

We are conducting a study to assess consumer responses to different products. Please review the sample advertisement on the next page and then complete the questionnaire that follows it. Read each question carefully and respond with your initial or gut reaction.

**Please circle a number for each of the items.** There are no right or wrong answers. We are simply interested in your own personal reactions. Thank you!

1. Please evaluate the **Italian (German) bicycle** in the advertisement, on the following dimensions:

|                                                    |                                       |                                                |
|----------------------------------------------------|---------------------------------------|------------------------------------------------|
| <b>unfavorable</b>                                 | 1-----2-----3-----4-----5-----6-----7 | <b>favorable</b>                               |
| <b>negative</b>                                    | 1-----2-----3-----4-----5-----6-----7 | <b>positive</b>                                |
| <b>bad</b>                                         | 1-----2-----3-----4-----5-----6-----7 | <b>good</b>                                    |
| <b>unsatisfactory</b>                              | 1-----2-----3-----4-----5-----6-----7 | <b>satisfactory</b>                            |
| <b>unattractive</b>                                | 1-----2-----3-----4-----5-----6-----7 | <b>attractive</b>                              |
| <b>would definitely not<br/>consider buying it</b> | 1-----2-----3-----4-----5-----6-----7 | <b>would definitely<br/>consider buying it</b> |

2. How would you rate the **Italian (German) bicycle** in the advertisement?

|                       |                                       |                   |
|-----------------------|---------------------------------------|-------------------|
| <b>ineffective</b>    | 1-----2-----3-----4-----5-----6-----7 | <b>effective</b>  |
| <b>not fun</b>        | 1-----2-----3-----4-----5-----6-----7 | <b>fun</b>        |
| <b>unhelpful</b>      | 1-----2-----3-----4-----5-----6-----7 | <b>helpful</b>    |
| <b>dull</b>           | 1-----2-----3-----4-----5-----6-----7 | <b>exciting</b>   |
| <b>not delightful</b> | 1-----2-----3-----4-----5-----6-----7 | <b>delightful</b> |
| <b>not functional</b> | 1-----2-----3-----4-----5-----6-----7 | <b>functional</b> |
| <b>not thrilling</b>  | 1-----2-----3-----4-----5-----6-----7 | <b>thrilling</b>  |
| <b>unnecessary</b>    | 1-----2-----3-----4-----5-----6-----7 | <b>necessary</b>  |
| <b>unenjoyable</b>    | 1-----2-----3-----4-----5-----6-----7 | <b>enjoyable</b>  |
| <b>impractical</b>    | 1-----2-----3-----4-----5-----6-----7 | <b>practical</b>  |

Now rate the **Italian (German) bicycle** in the advertisement after reading the following definitions:

Utilitarian products are mainly motivated by goal-oriented consumption.

Hedonic products are mainly motivated by pleasure-oriented consumption.

|                        |                                       |                    |
|------------------------|---------------------------------------|--------------------|
| <b>not utilitarian</b> | 1-----2-----3-----4-----5-----6-----7 | <b>utilitarian</b> |
| <b>not hedonic</b>     | 1-----2-----3-----4-----5-----6-----7 | <b>hedonic</b>     |

3. How would you rate the **Italian (German) people** on the following dimensions?

|                  | not much                              | a lot |
|------------------|---------------------------------------|-------|
| competent        | 1-----2-----3-----4-----5-----6-----7 |       |
| good-natured     | 1-----2-----3-----4-----5-----6-----7 |       |
| confident        | 1-----2-----3-----4-----5-----6-----7 |       |
| well-intentioned | 1-----2-----3-----4-----5-----6-----7 |       |
| capable          | 1-----2-----3-----4-----5-----6-----7 |       |
| warm             | 1-----2-----3-----4-----5-----6-----7 |       |
| efficient        | 1-----2-----3-----4-----5-----6-----7 |       |
| trustworthy      | 1-----2-----3-----4-----5-----6-----7 |       |
| intelligent      | 1-----2-----3-----4-----5-----6-----7 |       |
| sincere          | 1-----2-----3-----4-----5-----6-----7 |       |
| skillful         | 1-----2-----3-----4-----5-----6-----7 |       |
| friendly         | 1-----2-----3-----4-----5-----6-----7 |       |

4. Please indicate the degree to which you agree or disagree with the following statements:

- a. I am quite familiar with **Italian (German)** products.  

|                                        |                |
|----------------------------------------|----------------|
| strongly disagree                      | strongly agree |
| 1 -----2-----3-----4-----5-----6-----7 |                |
- b. I know a lot about **Italian (German)** products.  

|                                        |                |
|----------------------------------------|----------------|
| strongly disagree                      | strongly agree |
| 1 -----2-----3-----4-----5-----6-----7 |                |
- c. I own/have owned **Italian (German)** products.  

|                                        |                |
|----------------------------------------|----------------|
| strongly disagree                      | strongly agree |
| 1 -----2-----3-----4-----5-----6-----7 |                |
- d. I am quite familiar with **bicycles**.  

|                                        |                |
|----------------------------------------|----------------|
| strongly disagree                      | strongly agree |
| 1 -----2-----3-----4-----5-----6-----7 |                |

e. I know a lot about **bicycles**.

**strongly disagree** **strongly agree**  
1-----2-----3-----4-----5-----6-----7

f. I am quite familiar with **Italian (German) bicycles**.

**strongly disagree** **strongly agree**  
1-----2-----3-----4-----5-----6-----7

If so, please fill-in which brand: \_\_\_\_\_

5. The purpose of the following questions is to measure your involvement or interest in **bicycles**. Please judge **bicycles** on the following descriptive scales according to how YOU perceive **bicycles**:

|                            |                                       |                          |
|----------------------------|---------------------------------------|--------------------------|
| <b>unimportant</b>         | 1-----2-----3-----4-----5-----6-----7 | <b>important</b>         |
| <b>of no concern</b>       | 1-----2-----3-----4-----5-----6-----7 | <b>of concern to me</b>  |
| <b>irrelevant</b>          | 1-----2-----3-----4-----5-----6-----7 | <b>relevant</b>          |
| <b>means nothing to me</b> | 1-----2-----3-----4-----5-----6-----7 | <b>means a lot to me</b> |
| <b>useless</b>             | 1-----2-----3-----4-----5-----6-----7 | <b>useful</b>            |
| <b>worthless</b>           | 1-----2-----3-----4-----5-----6-----7 | <b>valuable</b>          |
| <b>trivial</b>             | 1-----2-----3-----4-----5-----6-----7 | <b>fundamental</b>       |
| <b>not beneficial</b>      | 1-----2-----3-----4-----5-----6-----7 | <b>beneficial</b>        |
| <b>doesn't matter</b>      | 1-----2-----3-----4-----5-----6-----7 | <b>matters to me</b>     |
| <b>uninterested</b>        | 1-----2-----3-----4-----5-----6-----7 | <b>interested</b>        |
| <b>insignificant</b>       | 1-----2-----3-----4-----5-----6-----7 | <b>significant</b>       |
| <b>superfluous</b>         | 1-----2-----3-----4-----5-----6-----7 | <b>vital</b>             |
| <b>boring</b>              | 1-----2-----3-----4-----5-----6-----7 | <b>interesting</b>       |
| <b>unexciting</b>          | 1-----2-----3-----4-----5-----6-----7 | <b>exciting</b>          |
| <b>unappealing</b>         | 1-----2-----3-----4-----5-----6-----7 | <b>appealing</b>         |
| <b>mundane</b>             | 1-----2-----3-----4-----5-----6-----7 | <b>fascinating</b>       |
| <b>nonessential</b>        | 1-----2-----3-----4-----5-----6-----7 | <b>essential</b>         |
| <b>undesirable</b>         | 1-----2-----3-----4-----5-----6-----7 | <b>desirable</b>         |
| <b>unwanted</b>            | 1-----2-----3-----4-----5-----6-----7 | <b>wanted</b>            |
| <b>not needed</b>          | 1-----2-----3-----4-----5-----6-----7 | <b>needed</b>            |

6. What thoughts/feelings passed through your mind when you saw this advertisement (fill-in)?

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7. In your own words, what are the main reasons for someone to buy this product (fill-in)?

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8. The bicycle in the advertisement was from \_\_\_\_\_ (fill-in the country-of-origin).

What are your thoughts/feelings about this country (fill-in)?

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9. Please answer the following questions in the space provided:

I am:    Male    Female    (circle one)

My age is: \_\_\_\_\_ (fill-in)

My nationality/ethnicity is: \_\_\_\_\_ (fill-in)

Thank you very much for participating in this study!

**Appendix 2: Study Treatments (Color Ad Stimuli, Two Examples)**

**IT'S AN EXHILARATING RIDE...**



**Featuring superior color and design**

**ON YOUR ITALIAN BIKE!**



**Sponsored by the Italian Bicycle Association**  
[www.iab.it](http://www.iab.it)

**IT'S A FASTER COMMUTE...**



**Featuring superior gear selection and brakes**

**ON YOUR GERMAN BIKE!**



**Sponsored by the German Bicycle Association**  
[www.gab.de](http://www.gab.de)

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