

INSTITUTO TECNOLÓGICO Y DE ESTUDIOS
SUPERIORES DE MONTERREY

EGADE



THE MODERATING ROLE OF PERCEIVED VULNERABILITY
IN THE RELATIONSHIP BETWEEN
PATRIOTISM AND CONSUMER ETHNOCENTRISM

DOCTORAL DISSERTATION

JORGE A. WISE L.

MONTERREY, N. L. MEXICO JULIO 2005

Copyright

by

Jorge A. Wise L.

2005

**THE MODERATING ROLE OF PERCEIVED VULNERABILITY
IN THE RELATIONSHIP BETWEEN PATRIOTISM
AND CONSUMER ETHNOCENTRISM**

by

Jorge Alberto Wise Lozano

Dissertation

Presented to the Faculty of the Graduate School of Business Administration and

Leadership (EGADE) of

the Instituto Tecnológico y de Estudios Superiores de Monterrey

in Partial Fulfillment of the Requirements

for the Degree of

Doctor of Philosophy

in

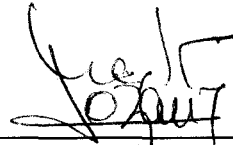
Management

Instituto Tecnológico y de Estudios Superiores de Monterrey

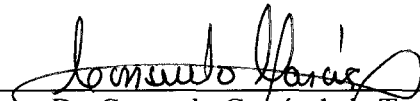
July 23th, 2005

**THE MODERATING ROLE OF PERCEIVED VULNERABILITY
IN THE RELATIONSHIP BETWEEN PATRIOTISM
AND CONSUMER ETHNOCENTRISM**

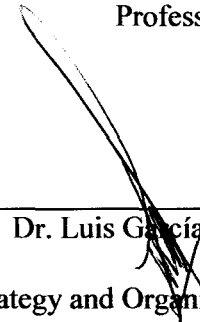
**Approved by
Dissertation Committee:**



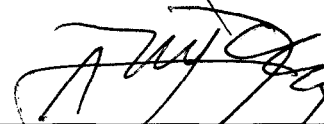
Dr. Gerardo Lozano Fernández,
Main Advisor,
Professor of Marketing



Dr. Consuelo García de la Torre,
Advisor,
Professor of Marketing



Dr. Luis García-Calderón Díaz,
Advisor,
Professor of Strategy and Organizational Theory



Dr. Alejandro Ibarra-Yunez
Director Ph.D. Program in Business Administration
EGADE, ITESM-Monterrey

DEDICATION

This **thesis** is dedicated to my loving wife Gabriela and to my children Jorge, Marcelo and Gabriela who

- have done with me this journey,
- have guided, supported, loved and encouraged me all the way
- are the reason to work harder every day.

Also, this **thesis** is dedicated to my parents and grand-parents who have been a great source of motivation and encouragement.

Finally, this **thesis** is dedicated to all those who believe in the richness of learning and like to begin the endless journey of knowledge.

Without all them this **thesis** and what it represents could not have been possible.

ACKNOWLEDGMENTS

First, I like to thanks God for guiding and helping me to finish this task.

Additionally, although a few words do not do justice to their contribution I would like to express sincere gratitude to these individuals who encouraged and supported me during my doctoral studies: Dr. Salvador Treviño, Dr. César Sepúlveda, C.P. Gerardo Luján, Dr. Alejandro Ibarra, Dra. Kate Gillespie, Dr. Carlos Ruy Martínez, Dr. Jorge Pedroza, Dr. Mauricio González, Dra. Consuelo García, Dr. Luis García-Calderón.

I would also like to thank my all friends, especially to Alejandro Garza and Alvaro Miller for their friendship which have last since childhood.

I also thank to all those whose names are here omitted but have participated somehow with me while I prepared this thesis.

No research endeavor is ever carried out in solitude. To each of the above, I extend my deepest appreciation.

ABSTRACT OF DISSERTATION

GRADUATE SCHOOL OF BUSINESS AND LEADERSHIP,
INSTITUTO TECNOLÓGICO Y DE ESTUDIOS SUPERIORES DE
MONTERREY, CAMPUS MONTERREY

Degree: Doctor of Philosophy Program: Doctoral Program in Management

Name of the Candidate: Jorge A. Wise L.

Main Advisor: Dr. Gerardo Lozano Fernández

Title: **THE MODERATING ROLE OF PERCEIVED VULNERABILITY IN
THE RELATIONSHIP BETWEEN PATRIOTISM AND
CONSUMER ETHNOCENTRISM**

This research establish that the consumer's perceived vulnerability to a threat is a relevant variable that modifies the preference for domestic origin products. This study demonstrates that perceived vulnerability to a threat such as damaging one's personal well-being is a relevant factor when consumers express their preference for domestic products, or consumer ethnocentrism.

Using a model relating patriotism and consumer ethnocentrism, perception of vulnerability is shown to be a pure moderation variable affecting that relationship. The literature about ethnocentrism has failed to recognize relevant factors other than patriotism that influence the level of consumer ethnocentrism. One such relevant factor is the individual's perceived vulnerability to a threat.

Using a Mexican sample of consumers, this study evidenced that patriotism is a relevant factor influencing the level of consumer ethnocentrism. Additionally the

interaction between patriotism and perceived vulnerability is found to positively moderate that effect. Using scales previously developed of patriotism and consumer ethnocentrism the findings suggest that patriotic Mexicans will be ethnocentric consumers. However, they will increase their ethnocentric feelings due to a perception of vulnerability to a threat affecting their well-being and standard of living.

Table of Contents

Introduction	1
Literature Review	5
Perceived Vulnerability	5
Consumer Ethnocentrism	11
The Ethnocentrism Concept	13
The Role of Consumer Ethnocentrism Tendencies	15
Consumer Ethnocentrism Research	18
Consumer Ethnocentrism Tendencies in Different Countries	19
Ethnocentrism Levels across Countries	23
Effects of Consumer Ethnocentrism on Consumer Behavior	25
Factors affecting Consumer Ethnocentrism	31
Demographic and Psychographic Variables	32
Potential Antecedents	36
Hypotheses	41
Perceived Vulnerability as a Moderator	42
Comparative and Absolute Perceived Vulnerability	44
Patriotism as predictor of Consumer Ethnocentrism	46
Control Variables	47
Research Methodology	49
Operationalization of the Variables	51
Independent Variable: Perceived Vulnerability	51
Independent Variable: Patriotism	57
Dependent Variable: Consumer Ethnocentrism Tendencies	59
Control Variables	61
Translation of the Instruments	64
Data Collection	65
Sample Size Determination	67
Determination of the Moderator Effect	68
Moderator Regression Analysis	71
Results and Discussion	73
Characteristics of the Sample	73
Hypothesis Test	77
Test of Moderator	77
Patriotism Factor	81
Control Variables	82
Demographic Factors	83
Self-Esteem Factor	90
Limitation and Further Research	93
Managerial Implications	96
Summary of the Analysis and Discussion	98

Annex A: Questionnaire in Spanish	100
Reference List	107
Vita	120

INTRODUCTION

This research establish that the consumer's perceived vulnerability to a threat is a relevant variable that modifies the preference for domestic origin products. Many times, consumers balance their personal well-being with their sense of in-group identity, particularly when their preference for domestic products above foreign ones is normative. This study demonstrates that perceived vulnerability to a threat such as damaging one's personal well-being is a relevant factor when consumers express their preference for domestic products.

To show the consumers preference for domestic products while avoiding foreign ones in the field of marketing, the term "consumer ethnocentrism" was initially used by Shimp (1984) and later operationalized by Shimp & Sharma (1987). Shimp & Sharma's findings support the ethnocentric conceptualization, in which the consumer prefers the in-group products that he/she identifies with the most, and avoids the out-group products. Out-group products are perceived as not being part of the in-group, and there is a sense of doing something inappropriate when out-group products are purchased. Ethnocentric consumers exhibit a tendency, a bias, favoring the in-group above the out-group. An ethnocentric consumer has an opinion regarding the out-group products with which he/she fails to identify. In a similar manner, the ethnocentric consumer exhibits an unreasonable determination to avoid out-group products and considers it incorrect to buy them. The above assertions call for deeper analysis into the dynamics of consumer's preferences for products. Of special interest, the present research aims at understanding and modeling the analysis

of perceived vulnerability as a threat to the consumer's preference for domestic products above imports.

The literature about ethnocentrism has failed to recognize relevant factors other than patriotism that influence the level of consumer ethnocentrism. One such relevant factor might be the individual's perceived vulnerability to a threat. The perception of a threat is assumed to inhibit risky behavior. The perceived vulnerability to a threat refers to one's belief about the likelihood of being affected by an event (Rosenstock, 1974), and this belief is expected to negatively influence the total effect of patriotism on the consumer ethnocentric tendencies. For example, ethnocentric consumers will behave in unanticipated manner to prefer imports as a result of their own perceived vulnerability to threats; this in turn lowers their ethnocentric tendencies. This study establishes this contention.

Patriotism and consumer ethnocentric tendencies are considered to be two different recognizable constructs. Shimp & Sharma (1987), Sharma, Shimp, & Shin (1995), and Balabanis, Diamantopoulos, Mueller, & Melewar (2001) found that patriotism has a significant impact on ethnocentric tendencies. Similarly, Nielsen & Spence (1997) concluded that consumers increase their ethnocentrism during celebration of patriotic events (i.e. Independence Day) and decrease it after the event passes. The reduction of patriotic elements is generally seen as contrary to ethnocentrism and is perceived as a source of a threat that is both unpleasant and imminent.

The present study fills the gap found in the literature by showing that consumers will modify their levels of ethnocentrism when preferring foreign or domestic products because they consider aspects other than patriotism, such as perceived vulnerability to a threat. Additionally, this study will be performed in Mexico extending the actual research found in the patriotism and consumer ethnocentrism relationship. Most of the research using both constructs has been done with European (cf. Balabanis, et al., 2001;) and US (cf. Sharma, et al., 1995b; Lee, Hong, & Lee, 2003) samples. Results from previous studies suggest that the impact of patriotism on consumer ethnocentrism may be country specific. However, the differences encountered in the empirical evidence could not be attributed to national differences only (Green & White, 1976). The differences may be attributed to the country's own historical or social factors. For example, Balabanis, et al. (2001) conjectured that patriotism was not significant for the Czech consumer do to the recent entry of the country into a free economy while Lee, et al. (2003) stated that patriotism for their US sample was not significant due to US consumers were more interested in their national superiority and dominance (Kosterman & Feshbach, 1989). On the other hand, the Turkish consumer has a more stable country-history thus patriotism was significant in its relationship with consumer ethnocentrism (Balabanis, et al., 2001). Similarly, Mexico has had a stable country identity during many years. Thus, it is hypothesized that Mexican consumers have a significant level of patriotism which in turn will have a high level of consumer ethnocentrism. More likely, this is the first study of this kind in Latin America advancing the knowledge in the field.

To achieve this objective, first a discussion of the consumer ethnocentric literature is offered. Then, a definition of perceived vulnerability is introduced with two distinct dimensions: absolute (or individual) and comparative. Next, a series of arguments are asserted which lead to the proposed hypotheses. Finally, there is a description of the study methods and measures used to test the hypotheses that follow.

LITERATURE REVIEW

This study examines a question that researchers have overlooked: besides patriotism, there are other factors which have an effect on the level of ethnocentrism displayed by consumers. The introduction of perceived vulnerability with its two dimensions, absolute and comparative, advances our understanding of consumers' ethnocentric behavior. The concept of perceived vulnerability will improve the marketing field by recognizing that consumers are susceptible to being affected by what they consider to be relevant events. The references and ideas included here are central to understanding the phenomenon of consumer ethnocentrism and its relationship with patriotism.

This section deals with two different themes: first, the next section introduces the concept of perceived vulnerability to a threat for the first time in the marketing field; and second, a review of the literature regarding consumer ethnocentrism which is a more known construct in international marketing.

Perceived Vulnerability

Studies of preference and choice examine the issue of how product attributes lead to consumer choice. In using a typical model (i.e. Fiske & Taylor, 1991), scholars assume that the consumer evaluates a product in terms of its visible (accessible) attributes or cues, then processes the information via one or more beliefs, and finally forms a preference (Huber & McCann, 1982). The visible cues refer to extrinsic

product cues such as country-of-origin labels of products. The beliefs are opinions regarding what is wanted and recognized. For instance, ethnocentric consumers consider it appropriate, desirable, responsible, and moral to prefer domestic products to imports. Preference formation is the consequence of being ethnocentric, that is, accepting the in-group and rejecting the out-group at the same time. Under the previous assumptions, consumers will have a normative preference for domestic products which refers to consumer ethnocentrism.

The consumer ethnocentrism literature maintains that preference for domestic products is an effective way to reduce undesirable, unwanted, irresponsible, or unethical conditions for the in-group. The assumption considers that the individual, as a consumer, will prefer the in-group's interest above not only the interest of the out-group, but also above personal considerations. Thus, ethnocentric consumers will consistently prefer domestic products in a normative fashion. However, there is a likelihood that such normative preference is cumbersome and unrepresentative of the way consumers actually think and organize their judgments (Lee, III & Warr, 1969).

In reference to the above, Kerlinger (1967) maintains that the focus of a judgmental structure (its "criterial referent") is usually positive. Criterial referents are references to beliefs, assumptions, evaluative criteria or specific rephrasing of one's own defining ideas. In practice, individuals are "*for*" something more than they are "*against*" anything, even though being in favor of one idea or preference means in fact opposing another. Criterial referents are sets of core values that may be held by the same individual without logical inconsistency. In the case of ethnocentrism,

consumers consider it appropriate and desirable to prefer domestic products above imports because the in-group thus stays safe. Still, at the same time consumers desire personal well-being (Taylor & Brown, 1988).

An ethnocentric consumer might compare the normative beliefs and their appropriateness with his or her desired personal standard of living and quality of life (Rook & Fisher, 1995). Thus, preferring domestic products might affect personal well-being if the preferred products fail to satisfy the consumer. In other words, an ethnocentric consumer will prefer a domestic product in order to maintain the in-group, but not necessarily because that preference sustains his / her own standard of living or quality of life. Under such conditions, the ethnocentric preference will be contrary to rational behavior and more consistent with consumer ethnocentrism tendencies. The ethnocentric consumer will feel that personal well-being is vulnerable when the domestic products preferred can interfere with his / her own standard of living or quality of life.

However, the research on product preference has failed to consider perceived factors related to the vulnerability to a threat. The threat is found when the consumer feels that the ethnocentric tendencies are an attack upon the consumer's well-being. Related research recognizes that such perceived vulnerability has two dimensions, one in relation to oneself (absolute) and the other in relation to others (comparative). Comparative perceived vulnerability refers to one's perception of being vulnerable in comparison to others. On the other hand, absolute perceived vulnerability indicates

one's perception of being vulnerable oneself. Both approaches are relevant to consumer ethnocentric tendencies.

Comparative Perceived Vulnerability. The literature that examines vulnerability indicates that individuals tend to see themselves as less vulnerable than others. That phenomenon has been reported in health (Smith, Gerrard, & Gibbons, 1997), risk (Taylor & Brown, 1994), and marketing studies (Svensson, 2002). The evidence indicates that individuals' inability to make accurate estimates tends to maintain an illusion of themselves as invulnerable, or they show an optimistic bias (McKenna, 1993; Weinstein, 1980; 1987). Studies of perceived vulnerability have demonstrated that people tend to think that they are less vulnerable than others to negative events (Gerrard, 1991; Taylor & Brown, 1988; Weinstein, 1987).

Absolute Perceived Vulnerability. People tend to underestimate their vulnerability in comparison to others, without denying their own vulnerability to adversity (Gerrard, Gibbons, & Bushman, 1996a). Risk literature considers that one's perception of a threat makes one feel vulnerable to unpleasant events (Slovic, Fischhoff, & Linchenstein, 1981). An ethnocentric consumer might perceive that he/she is less vulnerable to a threat when the in-group is kept safe.

Previous research and theory suggests that absolute perceived vulnerability is related to self-esteem. Individuals with high self-esteem like to enhance their attributes and abilities, and are less likely to accept their own poor performance or carelessness (Smith, et al., 1997). Similar findings were made by Boney-McCoy, Gibbons, & Gerrard (1999) where women with high self-esteem reported lower

perceived vulnerability to a threat than did women with low self-esteem. This suggests that when people perceive vulnerability to a threat, they respond by focusing on positive personal qualities that reduce unwanted conditions (Abel, 1997). Bias that enhances the self helps individuals with high self-esteem to validate and maintain their positive self-perceptions and expectations.

Self-esteem is arguably psychology's most popular construct, with linkages to many different areas of psychology. Self-esteem refers to an attitude (Rosenberg, Schooler, Shoenbach, & Rosenberg, 1995): how a person thinks about and evaluates the self (Baumeister, Campbell, Krueger, & Vohs, 2003); the degree to which a person approves himself / herself without implying perfection or superiority to others (Rosenberg, 1965). There are more than 2,000 self-esteem self-report related instruments in the literature, at least 58 of which assess the self-esteem construct. Many researchers report using the unidimensional Self-Esteem Scale developed by Rosenberg (1965), which is also one of the most cited in the literature and is one of the self-esteem instruments intended to be used in the present study. Indeed, absolute perceived vulnerability has been studied using the Rosenberg Self-Esteem Scale, or RSES. Smith, et al. (1997) and Gerrard, Gibbons, Reis-Bergan, & Russell (2000) used the RSES with adults to study perceived vulnerability. Smith, et al. (1997) concluded that people with high self-esteem maintain their optimistic biases or the illusion of themselves as invulnerable (McKenna, 1993). In line with that, Gerrard, et al. (2000) concluded that high self-esteem individuals tend to reduce their estimates

of vulnerability and overestimate the vulnerability of their peers. As used, self-esteem represents a personal trait which is established and maintained in adulthood.

It is necessary to consider that the self-esteem is a factor that is subject to change depending on the situation confronted as is the case under the consumer ethnocentric approach. The State Self-Esteem Scale (SSES) developed by Heatherton & Polivy (1991) represents a multidimensional measure of the self-esteem construct which improves its measurement considering a person's feeling of self-worth, which is more subject to change. The SSES is an instrument designed to measure *current* self-esteem states. Bagozzi & Heatherton (1994) report high internal consistency for the SSES across samples and between genders. State self-esteem, however, will depend on the particular state or situation rather than on a person's trait. The SSES refers to the changeable type of self-esteem that can be altered in situations of acute stress, such as personal changes or unemployment which are present in the consumer ethnocentric approach. An additional characteristic of the SSES is that it has been mainly used with adults (Linton & Marriott, 1996).

A person's feelings of current self-worth are assessed with the use of SSES to detect changes in self-esteem that measures of trait self-esteem often fail to detect. Trait self-esteem is measured using the RSES. Trait self-esteem is the more enduring aspect of a person's feelings of self-worth, and is relatively unchanging over time. In general, one's trait, or basic, self-esteem is established and unchanged in adulthood. State self-esteem, however, refers to the aspect of a one's feeling of self-worth that is more subject to change, depending on the particular state or situation. The use of the

RSES is more common when studying perceived vulnerability. However, as the perception of vulnerability under the consumer ethnocentric approach refers to a state where a change of preference is expected, it is reasonable to also consider the SSES in further analysis.

The aim of the present study is to analyze the consumer's perception of vulnerability as a cognitive factor which will be related to consumer ethnocentrism scores. On the assumption that consumer behavior is not random but rather a collection of organized and meaningful responses to the world as seen by the consumer (Hansen, 1972), the individual's perceived vulnerability will depend mainly on cognitive factors such as personality and attitude (Boney-McCoy, et al., 1999). When ethnocentric consumers perceive themselves to be vulnerable to a threat, their consumer ethnocentrism scores will be modified. Ethnocentric consumers will modify their preference for domestic products in order to reduce vulnerability. Being ethnocentric implies a normative tendency which fails to reflect an unpredicted behavior under the perception of vulnerability to a threat.

Consumer Ethnocentrism

Consumer ethnocentrism is a construct derived from the more general concept of ethnocentrism. The explanation of the meaning and origin of ethnocentrism and its influence on individuals is relevant to understanding the phenomenon of preferring domestic products over imports. As a specific application of the phenomenon of ethnocentrism, the construct of consumer ethnocentrism was developed to apprehend

the emotional dimensions of consumers' loyalty to domestic products and their negative prejudice toward imported products. To understand the previous, a description of the concept of ethnocentrism followed by an explanation of the consumer ethnocentrism construct is part of the description.

A very important perspective related to the consumer ethnocentrism research stream relates to factors that influence ethnocentric tendencies exhibited by consumers. Some academics have recently turned to investigating some antecedents of consumer ethnocentrism, but few researchers have analyzed those factors that impact the level of consumer ethnocentrism. This is one of the least-researched perspectives that examine consumer ethnocentrism, and it is part of the gap that the present study attempts to fill.

The development of consumer ethnocentrism research shows scant advances in the understanding of the factors that affect the preference for domestic products above imports. It is an important step for international marketing to determine these factors, because of the need to establish under what conditions such ethnocentric behavior exists. Sharma, et al. (1995) claim that ethnocentric tendencies in consumers are "part of a constellation of social-psychological and demographic influences" (p. 27). Consumer ethnocentricity is seen as an influence on consumer behavior (as in the previous perspective reviewed above) and is affected, in turn, by other related constructs. The consumer ethnocentrism literature has considered several potential antecedents such as demographic (i.e. age, gender, education, and income) and attitudes toward other countries (i.e. patriotism) variables. In this study,

the demographic variables are proposed as control variables and patriotism is part of the relationship analyzed.

The Ethnocentrism Concept

Ethnocentrism is a term often applied to the home country bias of the COO effect, but it is independent of the concept of origin bias (Herche, 1992). Ethnocentrism is a factor in making distinctions between in-groups (with which one identifies) and other groups. Ethnocentrism is considered a universal phenomenon, and is rooted in most areas of inter-group relations (Lewis, 1985).

The ethnocentrism concept “represents the universal proclivity for people to view their own group as the center of the universe, to interpret social units from the perspective of their own group, and to reject persons who are culturally dissimilar while blindly accepting those who are culturally like themselves” (Shimp & Sharma, 1987, p. 280). This definition offers an initial point for understanding the psychological aspect of group relations. Levinson (1969) notes that the general construct of “ethnocentrism” was first introduced and used descriptively by Sumner (1906) who defines ethnocentrism as:

“The view of things in which one’s own group is the center of everything, and all others are scaled and rated with reference to it ... Each group nourishes its own pride and vanity, boasts itself superior, exalts its own divinities and looks with contempt on outsiders.” (p. 13)

Although ethnocentrism was initially seen purely as sociological, it is studied in other fields such as social psychology, anthropology, and marketing.

Ethnocentrism relates to social identity theory (“the social-identity group is the nation”, Lantz & Loeb, 1996 p. 375) which means it can be used to analyze different countries, individual personalities, and the interaction of social forms. The division of the world into countries and nationalities implies a classification of people into in-groups (their own country) and out-groups (foreign countries) (Verlegh, 1999). Out-groups are the objects of negative opinions and hostile attitudes; those groups are considered as antithetical to the in-groups (Balabanis, et al., 2001; Shimp, 1984). In-groups are the objects of positive opinions and uncritically supportive attitudes; and comprise those groups with which one identifies oneself –and one’s country.

Individuals can develop attachment and loyalty to groups (in-groups) through the socialization process which entails the expectation of security and of recognition by the same group (Druckman, 1994). Ethnocentrism underlies a process of social categorization wherein persons are classified in terms of their national identity (Granzin & Olsen, 1998). Ethnocentric persons will value their in-group as salient with cognitive consequences. Ethnocentrism can be understood as an unfavorable (negative) attitude toward out-groups accompanied by a favorable (positive) attitude toward the in-group (Sumner, 1906).

Based on the above, the concept of consumer ethnocentrism was proposed as an economic form of capturing the individual consumer’s cognitions and emotions as they relate to product offerings from other countries (the out-groups). Consumer ethnocentrism was born independently of the conception of origin bias despite the fact that proponents of the consumer ethnocentrism stream consider it to be part of its

domain (cf. Balabanis, et al., 2001; Shimp & Sharma, 1987). Next, the role of consumer ethnocentrism in international research is explained.

The Role of Consumer Ethnocentrism Tendencies

The term “consumer ethnocentric tendencies” was introduced in marketing by Shimp & Sharma (1987) to refer to “the beliefs held by American consumers about the appropriateness, indeed morality, of purchasing foreign-made products” (p. 280). As a concept independent of the country-of-origin (COO) bias, it is derived from the general concept of ethnocentrism.

Consumer ethnocentrism represents the tendency for individuals to view their own group (the in-group) as superior to other groups (the out-groups), to view the out-groups from their own perspective, and to reject culturally dissimilar ideas while blindly accepting culturally similar ideas and people (Netemeyer, Durvasula, & Lichtenstein, 1991a). It reflects a normative sense of group identity that can motivate consumers to buy their own in-group’s products (Olsen, Granzin, & Biswas, 1993). Highly ethnocentric people take pride in their own values, symbols, and people, and dislike objects and values of the out-group. For them, purchasing foreign products is wrong because it hurts the domestic economy, jobs are lost, and it is unpatriotic.

Consumer ethnocentrism incorporates a feeling of doing something wrong when foreign made products are acquired (Shimp, 1984). The attitude toward imported products implies a prejudice and imports are seen by ethnocentric consumers as bad and unwanted. *Attitude* can be defined as a psychological tendency

that is expressed by evaluating a particular entity with some degree of favor or disfavor. A *psychological tendency* is posited as a state that is internal to the person. *Evaluating* is held to mean all classes of evaluative responding, whether overt or covert, cognitive, affective, or behavioral (Eagly & Shelly, 1993). Consumers exhibiting the ethnocentric characteristic of unfavorable bias toward imports have the tendency to negatively evaluate the out-group.

An ethnocentric consumer has an opinion regarding the out-group products with which he/she fails to identify. Highly ethnocentric consumers exhibit an unreasonable desire to avoid out-group products and consider that it is incorrect to buy them. Ethnocentric consumers have an inclination toward domestic products and a negative prejudice toward imports. The result is a tendency to reject what is perceived as part of the out-group and to accept the in-group. Having a prejudice against foreign made products suggests ethnocentric characteristics.

Preferring products with domestic origin reflects a positive and supportive perception of those products. Consumer ethnocentric tendency implies the existence of consumers who have ethnocentrism in different degrees (Johansson, Ronkainen, & Czinkota, 1994; Steenkamp, Hofstede, & Wedel, 1999). Consumers with low ethnocentrism consider it important to evaluate foreign-made products on their own merits regardless of their origin¹. On the other hand, highly ethnocentric consumers

¹ Olsen, et al., 1993 used the term “nonethnocentric” for consumers who evaluate foreign made products “on their worth in an objective fashion” (p. 309).

consider it appropriate, desirable, and patriotic to buy the products of their own country (Sharma, et al., 1995b).

To operationalize the measurement of consumer ethnocentric tendencies, Shimp & Sharma (1987) developed an instrument known as the CETSCALE (*Consumer Ethnocentric Tendencies Scale*). The instrument is “related to purchasing foreign- versus American-made products” (p. 281). The CETSCALE measures a tendency rather than an attitude as a proxy variable for attitudes. *Attitude* is used in reference to the consumer’s favorable or unfavorable feeling toward a specific entity (Fishbein & Ajzen, 1975) while *tendency*, as it is used in the instrument, captures a state of mind that shows more the inclination or disposition to prefer domestic products entirely over imports. In theory, the construct is not product-specific, but rather compares one country, originally the USA, with the rest of the countries. The different levels of ethnocentrism exhibited by consumers are asserted through the CETSCALE.

The CETSCALE is also a predictor of the purchase of imported goods. Herche (1992) analyses the scale’s predictive validity. Using a large sample of automobile and personal computer owners in the USA, he compares the COO of those products with CETSCALE scores. The correlation of the products’ COO and the CETSCALE was significant. Furthermore, a regression model predicted the purchasing behavior related to the products owned. The findings suggest that the CETSCALE is a tool that helps to understand buying behavior.

The development of the CETSCALE limited its use to a single country, the USA. The comparability of the ethnocentric phenomenon and a scale to be used in other countries involve research considering the functional-, conceptual-, and instrument-equivalence (Green & White, 1976). To validate the CETSCALE and its construct across countries requires doing research in different countries, which in turn implies marketing research across nations. That involves conducting research in other countries besides the USA. The next section explains the use of the CETSCALE in different countries and its implications for consumer behavior.

Consumer Ethnocentrism Research

The research stream related to consumer ethnocentrism has followed four main perspectives. The two most-researched perspectives are the analysis of ethnocentric tendencies within several countries, and of different levels of ethnocentrism (CETSCALE scores) across countries. The third perspective is not as well-researched as the previous two, and examines the effect of consumer ethnocentrism on different aspects of consumer behavior. The fourth and last perspective analyses factors that impact the level of consumer ethnocentrism (CETSCALE scores). This section then summarizes consumer ethnocentrism research from all of the four perspectives.

Consumer ethnocentric tendencies in different countries.

Consumer ethnocentric tendencies have been found in consumers across countries. Although the CETSCALE was developed for use with American consumers, researchers have found that consumers from various countries exhibit ethnocentric tendencies too. This finding is similar to the finding related to COO effects in different countries. Cross-national validation of the consumer ethnocentric tendencies construct is necessary to ensure its applicability in other countries besides the USA (Durvasula, Andrews, Lysonski, & Netemeyer, 1993).

The first researchers to assess the cross-nationality of the consumer ethnocentric tendencies were Netemeyer, et al. (1991). They examined the cross-national correspondence between the CESCALE and the construct of ethnocentrism across four countries (France, Japan, USA, and West Germany). To adapt the CETSCALE questionnaire to the samples' languages, the survey was translated and back-translated, checking it for consistency and minimizing idioms and colloquialisms. In order to use samples with similar characteristics, Netemeyer, et al. (1991) put together comparable populations in each of the four nations. The four samples were made up of undergraduate business students of similar ages.

The similar composition of the samples solved what is considered by Craig & Douglas (2000) to be a major concern in cross-national research. Using different sample composition will result in problems of correlation between the samples. Sekaran (1983) suggests the use of matched samples to overcome that problem. The selection of comparable samples across countries reduces the differences between

samples. The similar composition of Netemeyer, et al. (1991) samples seems appropriate under this criterion, as it reduces the cross-correlation problem. Irvine & Carroll (1980) also consider that having a relatively homogenous and comparable sample across countries is appropriate for testing cross-national theory.

The findings of Netemeyer, et al. (1991) indicate that the CETSCALE is a unidimensional instrument to measure the consumer ethnocentric tendencies construct. The CETSCALE was analyzed in comparison with other scales that had high ethnocentric elements. The subjects responded to different scales, assessing the importance of buying domestic products and their general attitudes toward purchasing foreign products. Although the CETSCALE is not product-specific, Netemeyer, et al. (1991) compared it with other scales to assess attitudes toward purchasing a foreign car. Such comparison requires some further analysis.

In contrast to the unidimensionality of CETSCALE, comparison of specific products is found in COO research. For example, Erickson, Johansson, & Chao (1984) used German and Japanese car brands to evaluate foreign products. Their results indicate that COO affects beliefs only. In another COO study, Parameswaran & Yaprak (1987) used two kinds of measures to argue for simple comparisons in cross-national marketing. One instrument measures the respondent's attitudes toward the peoples of three different countries (i.e. Italy, Japan, and West Germany). The other instrument measures the respondent's attitude toward products with the same three COOs. Using two samples from different markets (i.e. Turkey and USA), the

evidence indicates that attitudes toward countries and toward products comprise two different dimensions.

The CETSCALE captures the cognitive aspects of preferring domestic products above imports but does not identify any class, specific product, or brand. During the development and testing of the scale, Shimp & Sharma (1987) compared only the general concept of domestic products versus the general concept of foreign products, without specifying any particular product (i.e. car or camera) or specific brand. The comparison of specific products with diverse origins is found in COO research (cf. Chao, 1993; Chasin & Jaffe, 1979; Gürhan-Canli & Maheswaran, 2000; Jaffe & Martínez, 1995; Okechuku & Onyemah, 1999; White & Cundiff, 1978, among others). The design of the CETSCALE does not allow comparisons of specific products; rather it compares the purchase of foreign and domestic products as a whole.

Despite the comparisons using the CETSCALE done by Netemeyer, et al. (1991) for general attitudes toward purchasing a foreign car and for products from specific countries, the CETSCALE was found to correlate positively with the importance of buying domestic products. In contrast, CETSCALE correlates negatively with a general attitude toward buying foreign products. However, the West German sample was not significant for the latter. The study concludes that the CETSCALE validly measures the consumer ethnocentric tendencies construct, and it is a reliable measure of the consumer ethnocentrism construct across the countries. Validity and reliability are two necessary characteristics in measurement and research

behavioral sciences. The evidence by Netemeyer, et al. (1991) supports the use of the CETSCALE in more than one country (i.e. USA) to measure the consumer ethnocentric tendencies of the samples used.

In another study, Steenkamp & Baumgartner (1998) found that the CETSCALE exhibits measurement invariance across three countries (Belgium, Great Britain, and Greece). Measurement invariance refers to “whether or not, under different conditions of observing and studying phenomena, measurement operations yield measures of the same attribute” (Horn & McArdle, 1992 p. 177). “Invariance means no variance, no change” (Pedhazur & Schmelkin, 1991 p. 17). A scale exhibiting invariance measures the construct of interest, i.e. consumer ethnocentrism, without changing the meaning or interpretation of the empirical relationship to which the numbers refer across countries. Demonstration of invariance of measurement equivalence is a logical prerequisite to the evaluation of substantive hypotheses regarding differences between samples from different countries.

Although the CETSCALE measures the same construct across countries, the findings by Steenkamp & Baumgartner (1998) indicate that consumers in the countries studied have different CETSCALE scores. The study using consumer ethnocentric tendencies supports the notion that individual consumers have different levels of ethnocentric tendencies. Belgian consumers were found to be less ethnocentric than either Britons or Greeks, and Britons are less ethnocentric than Greeks. In other words, Greek consumers have firmer opinions about the morality of buying foreign products than the consumers of the other two countries. The

measurement of invariance found by Steenkamp & Baumgartner (1998) thus assesses the applicability of the CETSCALE in countries other than the USA where it was developed.

Ethnocentrism levels across countries.

Establishing the applicability of frameworks developed in one country to other countries is an important step in establishing the generalizability of consumer behavior theories. Thus, phenomena established in one country (i.e. USA) need to be tested empirically in other countries (Albaum & Peterson, 1984; Lee & Green, 1991). In that regard, separately, Netemeyer, et al. (1991) and Steenkamp & Baumgartner (1998) determined that consumer ethnocentric tendencies are found in several countries. Additionally, the latter established that CETSCALE is cross-country invariant (Hui & Triandis, 1985). Cross-national research involves the question of whether the instrument developed within one country can be applied to other cultures in the same way to measure the same construct. Successfully investigating this potential pitfall reduces the risk of interpreting similarities that are in fact minor differences, or else purely incidental.

The previous research indicates that the CETSCALE measures the consumer ethnocentric tendencies construct across countries and establishes the data equivalence of the results between countries (Aulakh & Kotabe, 1993). The findings of Netemeyer, et al. (1991) establish the validity and reliability of the CETSCALE in measuring the ethnocentrism of consumers. In addition, Steenkamp & Baumgartner

(1998) determined that CETSCALE can be used to research consumer ethnocentric tendencies in different countries. Consumer ethnocentrism tendencies have recently been studied in other countries based on these previous findings.

For instance, Steenkamp, et al. (1999) used the CETSCALE in 11 countries of the European Union to find a negative relationship with consumer innovativeness, which is the predisposition to buy new and different products and brands.

Replicating, in a certain way, what Netemeyer, et al. (1991) had done before, Luque Martínez, Ibañez Zapata, & del Barrio García (2000) assessed the reliability and validity of the CETSCALE in Spain. Later, Gürhan-Canli & Maheswaran (2000) examined whether cultural orientation moderates COO effects in Japan and the USA, measuring ethnocentrism with the CETSCALE. Their findings suggest that ethnocentrism does not moderate the effects of culture on evaluations of products. In a similar manner, Piron (2002) found that Singaporeans tend to exhibit low ethnocentric tendencies about outshopping in neighboring Malaysia. He defines outshopping as the behavior of traveling beyond the home country to purchase goods in another country.

The consumer ethnocentrism research stream gives evidence of the preference for domestic products across countries. Framing ethnocentric behavior as a unique economic construct in the form of consumer ethnocentrism, a recognized construct, represents an advance in our understanding of the preferences and behavior of consumers. The operationalization of the construct accomplished by Shimp & Sharma (1987) with the CETSCALE, and its later use by other scholars with samples

from several countries, implies a cross-country generalizability of the consumer's preference for domestic products above the products of foreign origin.

Effects of consumer ethnocentrism on consumer behavior.

The third perspective analyzes consumer ethnocentrism and its effects on several other related aspects of consumer behavior. Consumer ethnocentrism has been seen to be a factor that influences consumers. This influence helps to understand the consequences of preferring domestic products to imports. Although the focus on this perspective has been sparsely studied, several studies have demonstrated that consumer ethnocentrism has an influence on choices and consumption patterns.

The study of the consequences of ethnocentrism for marketers has become relevant in recent years. The literature offers a number of examples in which these consequences are studied. For instance, Sharma, et al. (1995) analyze the impact of consumer ethnocentric tendencies on attitudes toward importing products. Consumer ethnocentrism is shown to causally determine consumers' attitudes toward importing foreign products into their domestic economies. This key theoretical relationship was found to be moderated by two factors: the perceived necessity for imported products, and the perception that imports pose threats to the consumer's personal welfare and/or the welfare of the domestic economy.

Korean consumers, in the sample employed by Sharma, et al. (1995), tend to show positive attitudes toward domestic products. Consumer ethnocentrism was

operationalized with the CETSCALE. The scale was translated to Korean, back-translated to English and then checked for consistency. Despite the problem of using a different alphabet, such a translation technique enhances translation equivalence (Durvasula, Andrews, & Netmeyer, 1993) and it is suggested when an instrument is initially developed for another country and / or in a different language (Craig & Douglas, 2000). On the other hand, the use of a single sample of Korean consumers represents a limitation of the results across countries. However, the reliability of the scale is high (Cronbach's alpha of 0.91) implying that Koreans have consumer ethnocentric tendencies.

More recently, Klein and colleagues (Ettenson & Klein, 2002; Klein, 2002; Klein & Ettenson, 1999; Klein, Ettenson, & Morris, 1998) have focused on and developed the construct of animosity. They consider consumer ethnocentrism as one antecedent of product judgments and willingness to buy. Animosity is defined by Klein, et al. (1998) as "the remnants of antipathy related to previous or ongoing military, political, or economic events" (p. 90). Animosity is seen as an element that affects consumers' purchase behavior in avoiding products from specific countries that have offended their country militarily, politically, or economically. Consumer ethnocentrism and animosity represent two different dimensions of consumer preference and consumer purchase behavior in the international marketplace.

The main difference between animosity and consumer ethnocentrism is the consumers' quality perception of the quality of foreign products (Klein, Ettenson, & Krishnan, 2000). Ethnocentric consumers prefer domestic products because they

believe that buying imports represents both economic and moral problems and also because they view domestic products as superior to foreign ones. On the other hand, it is possible that consumers have animosity toward a specific country but do not denigrate the quality of the products from that country. In this situation, consumers might be unwilling to buy products from a particular country, but still believe that its products are of high quality.

Klein and colleagues claimed to study the aversion to buying foreign products using the CETSCALE. With a Chinese sample (Klein, et al., 1998), the country selected to elicit animosity was Japan; the animosity between the two countries is the result of centuries of conflict between China and Japan, in particular the Japanese invasion and occupation of China during World War II (1931-1945). The researchers concluded that the animosity model of foreign product purchase includes the construct of consumer ethnocentrism, which in turn influences the consumer's product judgments and willingness to buy.

In a subsequent study, Klein & Ettenson (1999) researched the animosity of US consumers toward Japanese products. In a similar manner, Klein (2002) selected Japan and South Korea to demonstrate different levels of animosity in a US sample. Japan is said to evoke a high level of animosity as a result of World War II and the perception of Japan's unfair trade dealings with the USA. On the other hand, there is no history of animosity between South Korea and the USA. It should be noted that the animosity studies by Klein and colleagues restricted the use of the CETSCALE to only some of the items in each case.

The manipulation and use of the CETSACLE by Klein, et al. (1998) and Klein (2002) helped to change its original conceptualization. First, the use of Japanese and South Korean products is different from the concept of foreign product used by Shimp & Sharma (1987) to develop the CETSCALE. The scale was developed considering foreign products in general and not products from any specific country. Comparison of particular products and countries seems to be a natural development at this stage of the research; however, this comparison is also necessary in order both to establish that the CETSCALE and identified products or countries can be compared, and to establish the corresponding meaning of the comparison. Second, to analyze the measurement properties of the animosity model, Klein, et al. (1998) employed latent variable structural equation modeling (Jöreskog & Sörbom, 1993). The root mean square error of approximation (RMSEA) of 0.10 was unacceptably high. Due to its account of error approximation and to the model fit measure offered, the RMSEA is been recognized as one of the most informative criteria in covariance structure modeling (Byrne, 1998).

While a RMSEA of zero means a perfect fit to the model, Browne & Cudeck (1993) assert that RMSEA values between 0.0 and 0.05 indicate a close fit, less than 0.08 reflect a reasonable fit, and greater than 0.08 reflect a poor fit. The fit evaluation of the model refers to the extent to which a model fits an analyzed data set. Thus, to improve the fit of the model, Klein, et al. (1998) selected six items from the CETSCALE which showed a lower RMSEA of 0.049. Similar procedures were undergone in Klein (2002) to select a different subset of items from the CETSCALE.

Although the strategy of improving the consistency between model and data is not intrinsically erroneous, this practice has a harmful effect on the measurement of interest (in this case the CETSCALE), particularly when the researcher abandons the original scale in favor of statistical indices.

The manipulation of the CETSCALE has become commonplace among researchers. When Shimp & Sharma (1987) operationalized consumer ethnocentrism tendencies through the CETSCALE, a reduced form of 10 items was employed. However, the final 17-item version includes the reduced version. The use of the full CETSCALE is preferred when studying the influence of consumer ethnocentrism on consumer behavior; it offers more information on the normative preference for domestic products above imports.

Using the full CETSCALE, Durvasula, Andrews, & Netemeyer (1997) examined the differences in ethnocentrism between the USA and Russia. The results indicate that Russians are less consumer-ethnocentric and possess more accepting beliefs and attitudes toward foreign made products than does the US sample. Watson & Wright (2000) proved a relationship between New Zealand consumer ethnocentrism and attitudes toward products imported from culturally similar countries (USA and Germany), or from culturally dissimilar ones (Italy and Singapore). For the analysis, a product category available domestically was selected (i.e. refrigerators) with two product categories not produced in New Zealand (i.e. televisions and cameras).

The use of specific products seems to be accepted by some researchers. Supphellen & Rittenburg (2001) also use products and the CETSCALE. They concluded that Polish ethnocentric consumers express their ethnocentric feelings for domestic brands, accentuating the domestic brands' positive aspects even when foreign brands are clearly better in the consumer's mind than domestic alternatives. The manipulations of the CETSCALE and its use in comparing with specific countries and products are two considerations that require more attention.

Understanding the effects of consumer ethnocentrism on consumer behavior has become an important aspect of research. Manipulating the items developed to measure a construct with the specific intention to satisfy a statistical index implies that the instrument (in this case the CETSCALE) will measure something different from the original construct (i.e. consumer ethnocentric tendencies). Selecting only some of the items from the CETSCALE will represent a different operationalization of consumer ethnocentric tendencies. On the other hand, comparing a construct that was developed in one direction, for instance the general concept of foreign products, with a specific class of products or countries requires further analysis. Researchers do not perform such scrutiny when comparing CETSCALE with identified foreign products or countries. Nevertheless, the previous review of CETSCALE results shows that levels of ethnocentrism vary among consumers.

Factors affecting consumer ethnocentrism.

The fourth and final perspective related to the consumer ethnocentrism research stream relates to factors that influence ethnocentric tendencies exhibited by consumers. Some academics have recently turned to investigating some antecedents of consumer ethnocentrism, but few researchers have analyzed those factors that impact the level of consumer ethnocentrism. This is perhaps the least-researched of the four perspectives that examine consumer ethnocentrism, and it is part of the gap that the present study attempts to fill.

The development of consumer ethnocentrism research shows scant advances in the understanding of the factors that affect the preference for domestic products above imports. It is an important step for international marketing to determine these factors, because of the need to establish under what conditions such ethnocentric behavior exists. Sharma, et al. (1995) claim that ethnocentric tendencies in consumers are “part of a constellation of social-psychological and demographic influences” (p. 27). Consumer ethnocentricity is seen as an influence on consumer behavior (as in the previous perspective reviewed above) and is affected, in turn, by other related constructs. Two kinds of antecedents are considered in the literature. On the one hand, demographic (i.e. age, gender, education, and income) and psychographic (i.e. military service) characteristics of the population have been considered. On the other hand, several potential antecedents (i.e. openness to foreign cultures, conservatism, and attitudes toward other countries such as patriotism) have been proposed as influences on consumer ethnocentric tendencies.

Demographic and psychographic variables.

Income. Income has been found to significantly influence consumer ethnocentric tendencies. Balabanis, et al. (2001) and Sharma, et al. (1995) concluded in separate studies that low income consumers are more ethnocentric than those with higher income. The former study used samples from the Czech Republic and Turkey and the latter only from Korea. In all the cases, income level correlated negatively with consumer ethnocentric tendencies.

Gender. Gender is probably the demographic variable that has been most researched as an influence on consumer ethnocentrism. Three researchers have found that gender is significantly related to ethnocentrism. First, Sharma, et al. (1995) concluded that Korean women exhibit greater consumer ethnocentric tendencies than men. Then, Nielsen & Spence (1997) claimed that US women were more consumer ethnocentric than men. Later, Balabanis, et al.'s (2001) found that Turkish women exhibit greater consumer ethnocentric tendencies than Turkish men, in line with the previous research. Nevertheless, the Czech sample was found not to support that female consumers are more ethnocentric than males.

The political and economic transformation undergone by the Czechs is deemed by Balabanis, et al. (2001) to explain the differences found across countries. The Czech Republic underwent recent transformations and became a free country, while Turkey has maintained its national identity and independence since the 1920s. The Czech Republic was neglected during most of the 20th century, so its transformation into a democracy and an open economy represented deep social and

structural modifications. In contrast, Turkey has been a single country for almost the whole century.

It is plausible that both genders in the Czech Republic exhibit similar preference for imports. Countries' social-structure factors account for many of the differences found in consumer behavior. Countries' differences in this regard are key characteristics underlying differences in behavior among them (Steenkamp, 2001). Schooler (1996) holds that "social-structural conditions associated with industrialization are almost invariably linked to an increase in the openness of individuals to new experiences" (p. 345). The Czech suffered a relevant social-structure transformation in 1989, when the Soviet regime was overthrown and the economy was subsequently opened. Being open to new experiences implies accepting imports just because they are new for the consumer. The consequences of similar transformations can result in similar levels of ethnocentrism by gender, which in turn means that gender is not a significant predictor of consumer ethnocentric tendencies.

Age. Similar to gender, the demographic variable of age has been found to have mixed significance across countries. Separately, Nielsen & Spence (1997) and Balabanis, et al. (2001) found evidence in the US and in Turkish samples that older consumers had higher CETSCALE scores than younger ones. In contrast, Korean (Sharma, et al., 1995b) and Czech (Balabanis, et al., 2001) consumers fail to show a significant influence of age on their ethnocentric tendencies. *Demographic:*

Level of education. In the Korean sample only, Sharma, et al. (1995) found that level

of education influences consumers' ethnocentric tendencies. In contrast, in the Czech and Turkish samples, Balabanis, et al. (2001) concluded that education was not a significant predictor for consumer ethnocentric tendencies. Differences across countries are expected, but Balabanis, et al. failed to properly consider the circumstances of the two samples. What is significant for a particular phenomenon in one country might not be significant in another. Further analysis is necessary to explain the disparity in the influence of the level of education, which probably reflects the fact that changes in a particular country affect only that country and not others.

Military Service. One of the psychographic variables previously studied as an influence on consumer ethnocentric tendencies is military service. In a longitudinal study before, during, and after patriotic events (e.g. Independence Day in the USA), Nielsen & Spence (1997) stated that those who had served or were currently serving in the army had higher CETSCALE scores than those who had not served. Their conclusion is that US consumers with a military background were more consumer ethnocentric than those who had not been in the military.

The three studies which analyzed the influence of demographic and psychographic variables on consumer ethnocentric tendencies employed different statistical analyses. Each of these studies used a different methodology to determine the relationship of the variables of interest to the CETSCALE scores. However, the incremental complexity of the analysis cannot be blamed for the differences seen among countries.

The previous variables were also analyzed with different techniques. For instance, Sharma, et al. (1995) evaluated variables related to consumer ethnocentrism tendencies using correlation analysis (represented with the r statistic²). Correlation involves a measure of the degree to which two variables are related to each other only. In contrast, Nielsen & Spence (1997) employed analysis of variance (ANOVA) and Balabanis, et al. (2001) performed a hierarchical regression. ANOVA compares the means of the independent variables to the dependent variable to see if the variables' means are significantly different from each other.

In itself, regression analysis allows researchers to examine how variables relate to each other, the strength of the relationships, and the relative predictive power of the independent variable on the dependent variable, among other uses.

Hierarchical regression is also known as incremental variance partitioning (Pedhazur & Schmelkin, 1991). To investigate the variance accounted for in the model (represented with the R^2 statistic³), the independent variables can be entered in the analysis in no specific order, one at a time, noting at each stage the increment in R^2 due to the variable being entered.

Consumers may differ in their perceptions of relationships between influences and the construct of interest; thus, differences between samples across nations are common. With the evidence at hand, it can be said the relationship between

² The correlation coefficient r is one of the most basic measures of the association among variables, and a foundational statistic for a several more complex statistics. The closer r is to 1, the stronger the relation between the variables under consideration.

³ The coefficient of determination R^2 provides the percentage of the variance explained in a regression model, and it measures the effect size used in multiple regression. A high R^2 indicates that the effect size is large suggesting practical significance as well as statistical significance.

demographic and psychographic variables and consumer ethnocentric tendencies is, apparently, country specific. The differences encountered in the empirical evidence could not be attributed to national differences only (Green & White, 1976).

The problem of finding significant variables for a particular phenomenon in one country but not in another is a widely discussed topic in the literature of international marketing (cf. Craig & Douglas, 2000; Sekaran, 1983). It is still necessary to improve research on the consumer ethnocentric tendencies construct and its influencers. One goal of the present study is to advance knowledge in that direction.

Potential antecedents.

The literature of consumer ethnocentrism has customarily considered that different social and psychological factors affect ethnocentrism. The literature mentions factors related to culture and to attitudes toward countries. Sharma, et al. (1995) studied both kind of factors while Balabanis, et al. (2001) only considered attitudes toward countries. Sharma, et al. (1995) concluded that the CETSCALE is negatively correlated with cultural openness (experience and openness toward people, values, and artifacts of other cultures). In the same study, CETSCALE was found to correlate positively with collectivistic tendencies (cf. Hofstede, 1983) and with both conservative (those who celebrate traditions and traditional social institutions) and patriotic (love for one's country) attitudes.

Patriotism is one of the social-psychological variables closely linked with the phenomenon of ethnocentrism and with the construct of consumer ethnocentrism. It is one of the influences studied most by academics researching the antecedents of consumer ethnocentrism⁴. Balabanis, et al. (2001), Klein & Ettenson (1999), and Sharma, et al. (1995) analyzed the influence of patriotism on the CETSCALE scores. Patriotism was not significant for the Czechs, due to the social-structural transformations of the country, as explained above⁵. On the other hand, Korean, Turkish, and U.S. patriotism was found to be a principal motivation for consumer ethnocentrism. In both cases, patriotism correlated positively with the CETSCALE scores.

Patriotism. Patriotism has demonstrated its significant influence on consumer ethnocentric tendencies. Patriotism refers to love of one's country. Such love implies bias for one's country (Jordan, 1904) and readiness to sacrifice for it (Han, 1994). Patriots are those who love their country simply because it is their country and because they and their parents have lived there too (Tocqueville, 1956). Eventually, one will learn to love his /her own country; such love is taught, inculcated, and / or acquired. The international marketing literature includes patriotism as an affective

⁴ Nationalism (superiority and dominance of one's country) and internationalism (positive attitudes toward other nations) are two variables related to attitudes toward countries, but their influence on CETSCALE scores is inconsistent, even though Balabanis, et al. (2001) considered both in their analysis of influencers. Internationalism failed to demonstrate its significance and nationalism was significant only for the Czech sample. Further cross-country research is necessary to determine whether there is any impact of nationalism on the consumer ethnocentric tendencies in more countries.

⁵ The social-structural transformation is the main reason given by Balabanis, et al. (2001) for the differences between the samples in the Czech Republic and Turkey.

and cognitive factor which influences consumer's emotions toward domestic products (Han & Terpstra, 1988).

Patriotism is an abstract and a universal principle to which people subscribe (Adorno, Frenkel-Brunswik, Levinson, & Sanford, 1969; Mummendey, Klink, & Brown, 2001). Viroli (1995) explains that patriotism includes non-rational sentiments such as love, passion, and specific commitment to one's country. It resembles pride and interest in one's country (Naussbaum, 1994). Kosterman & Feshbach (1989) states that patriotism is an essential value that represents feelings of attachment to one's country. The country is seen as the in-group, implying feelings of belongingness, responsibility, and pride in one's country and in everything that comes from it⁶ (e.g. the flag, national independence day, and products, among others).

Patriotism is by nature defensive. It works as a kind of defense mechanism for the in-group. As part of the positive in-group value of being and acting as expected, a patriot will protect his / her country and whatever comes from it (Fiske & Taylor, 1991). The function of patriotism is also a "moral problem" (Jordan, 1904, p. 15). A patriot is eager to reflect positive national sentiments toward the in-group. Consumers with patriotic feelings protect domestic products by having a positive attitude toward them and a negative attitude toward foreign products (Han, 1988).

⁶ The celebration of patriotic events such as Independence Day and Olympics was considered by Nielsen & Spence (1997) as a moderator between the demographic and psychographic variables on one hand and the CETSCALE scores on the other. They found that during patriotic events, positive feelings toward everything related to one's country increase; but the same patriotic feelings decrease after the event has passed.

Loving one's country does not include feelings toward other countries nor toward their products. The patriotic expression of love for one's country does not entail physical hostility (Doob, 1964) or animosity (Klein, et al., 1998) toward foreign products. The feelings toward products (whether domestic or imported) are found in the ethnocentric tendencies exhibited by consumers. The intention to purchase domestic rather than foreign products is an indication that the consumer has attitudes found in patriotic consumers (Han, 1988). Patriotism is related to ethnocentrism (Adorno, et al., 1969) and works as a mechanism protecting the in-group and its products from diverse threats (Sharma, et al., 1995b).

The need for a mechanism to protect the in-group and its products from threats is a central problem of choice in consumer behavior (Jacoby, Johar, & Morrin, 1998). In many cases, the outcome of the choice becomes clear in the future (Taylor, 1974). Consumers make decisions based on the information at hand, despite perceived threats that they may feel at the moment of choice. When imports threaten the personal and domestic economy, consumers may take patriotic attitudes which in turn result in ethnocentric consumer behavior that favors domestic products over foreign ones. Although the subjective perception of reality can differ from objective circumstances, the perception of a threat may affect the consumer's preferences.

The feeling of vulnerability resulting from the perception of a threat is different for each consumer (Gerrard, et al., 1996a). The feeling of being affected in the future for a decision taken today is said to depend on one's unique perception of the threat (Strathman, Gleicher, Boninger, & Edwards, 1994; Taylor, 1974). All

things being equal, individuals will prefer to use behaviors that maximize their sense of cognitive balance (Korman, 1974). Hence, patriotic attitudes are to be expected among consumers when they feel that the in-group is or will be affected. Differing perceptions of vulnerability to distinct threats has not yet been assessed by the consumer ethnocentrism literature.

The research stream related to consumer ethnocentrism needs to consider paradigms that influence or moderate the form and/or strength of the relationship shown between patriotism and the consumer ethnocentric tendencies. Among the different attitudes toward one's own and other countries that are found in the literature, patriotism has been shown to have the most significant influence on consumer ethnocentric tendencies. Both the distinct threats perceived by consumers and the influence of those perceptions beg further analysis. The next section introduces the hypotheses considering the concept of perceived vulnerability to a threat and its effect on the ethnocentric preferences for products.

HYPOTHESES

The overall aim of the proposed empirical research is fourfold. First, investigate the effect of the newly introduced concept of perceived vulnerability to a threat under the consumer ethnocentric approach; second, test whether perceived vulnerability serves as a mediator in the relationship between patriotism and consumer ethnocentric tendencies; third, examine the joint effect and individual influence of the two dimensions of perceived vulnerability in the patriotism-consumer ethnocentric tendencies relationship; and fourth, analyze the role of consumer demographics in influencing consumer ethnocentrism.

The way consumers perceive products that are made in different countries is part of the ethnocentric tendencies that consumers exhibit. Such consumers will modify their preference, if one considers their inclination for domestic products over imported, because of a feeling of obligation toward the in-group rather than the out-group. Since patriotism has been found to positively influence consumer ethnocentrism tendencies, the perceived vulnerability to a threat, such as a reduction in one's well-being, will have an effect on the relationship. Perceived vulnerability will have a moderator effect on one's preference for domestic products.

The above arguments can be brought together to yield predictions concerning the empirical relation of perceived vulnerability to consumer ethnocentrism. The theory of ethnocentrism links patriotism to the consumer preference for domestic products above imports. However, in many situations, consumers fail to follow the normative preference, resulting in being consumer ethnocentric even when they

perceive that their well-being might be affected (Rook & Fisher, 1995). As stated before, this study proposes that the perception of vulnerability to the threat of a reduction in one's quality of life and standard of living will moderate somehow the normative preference for products with domestic origin.

This study also concentrates on the relationship of patriotism to consumer ethnocentric tendencies. The empirical evidence reveals the significant influence of patriotism on ethnocentric consumers. The bias and sacrifice for one's country depicted by ethnocentric consumers does not imply any hostility (Doob, 1964) or animosity (Klein, et al., 1998) toward foreign products. Indeed, ethnocentric consumers prefer domestic products above imports just because they consider such a preference appropriate and desirable for the in-group. This tendency is deemed to keep the in-group safe. Despite the aforementioned, personal well-being is still sought and desired. Hence, the consumer is confronted with a situation which is perceived as a threat and will moderate the influence of patriotism and the tendency to be consumer ethnocentric. The strength of the relationship between patriotism and consumer ethnocentric tendencies should vary as a function of perceived vulnerability to a threat.

Perceived vulnerability as a Moderator. Previous research has shown that patriotism is an antecedent of consumer ethnocentric tendencies. However, researchers have failed to consider other factors which could affect that relationship. The positive relationship between patriotism and consumer ethnocentrism, evidenced by researchers is likely to be moderated by the perception of vulnerability to a threat.

A moderator variable is a quantitative, or qualitative, variable that affects the direction and/or strength of the relation between a predictor variable –i.e. patriotism– and a criterion variable –i.e. consumer ethnocentrism– (Baron & Kenny, 1986; Cohen & Cohen, 1983; Erickson & Nosanchuk, 1992; Sproull, 1988; Zadeck, 1971a).

Consumers perceive products differently in terms of whether those products are relevant to them personally or to the domestic economy in general. When the preference for domestic products is seen as a threat to one’s well-being, the influence of patriotism should vary depending on the direction and/or strength of the moderated effect. Therefore, there are several options to consider. On one hand, when the perceived vulnerability to a threat is small or negligible, the influence of patriotism on consumer ethnocentric tendencies will maintain or reduce the actual relationship.

Thus,

H_{1a}: The lower the level of perceived vulnerability to a threat, the similar or smaller the positive impact of patriotism on consumer ethnocentric tendencies.

Translating the previous hypothesis to mathematical terms, being positive the slope between the predictor variable (patriotism) and the criterion variable (consumer ethnocentric tendencies), the influence of the moderator variable (perceived vulnerability to a threat) will maintain or increase the slope of the relationship. The previous means that when a consumer feels almost no vulnerability to a threat to one’s well-being, then the consumer will maintain or diminish the preference for domestic products. On the other hand, when the perceived vulnerability to a threat is

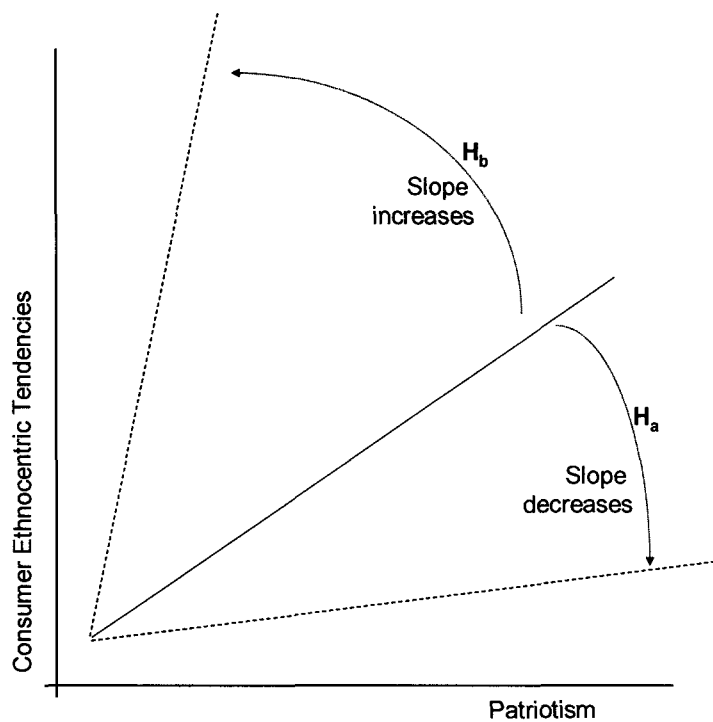
large, the influence of patriotism on consumer ethnocentric tendencies will increase its impact in the relationship. Thus,

H_{1b}: The higher the level of perceived vulnerability to a threat, the greater the positive impact of patriotism on consumer ethnocentric tendencies.

In this case, the slope of the patriotism-consumer ethnocentrism relationship is increased; the preference for domestic products increases. A graphical description of the hypotheses is found in Figure 1.

Figure 1

Graphical Representation of the Hypotheses



Comparative and Absolute Perceived Vulnerability. The two dimensions of perceived vulnerability are considered to be independent (Weinstein, Lyon, Rothman,

& Cuite, 2000). Logical grounds indicate that both dimensions, comparative and absolute perceived vulnerability, are part of the total perceived vulnerability. It is plausible to evince, at the same time, consumer ethnocentric tendencies and a personal interest in one's well-being. The moderator effect of each dimension on the patriotism-consumer ethnocentric tendencies relationship is expected to be part of the total moderator effect of perceived vulnerability. Similar to the previous hypotheses, it is relevant to determine whether the effect of each of the two dimensions is a moderator of consumer ethnocentric tendencies.

Absolute and comparative perceived vulnerability are expected to moderate the effect of patriotism on consumer ethnocentric tendencies. Therefore, following the same logic previously undertaken, when the comparative perceived vulnerability to a threat is small or negligible, the influence of patriotism on consumer ethnocentric tendencies will maintain or reduce the actual relationship. Thus:

H_{2a}: The lower the level of comparative perceived vulnerability to a threat, the similar or smaller the positive impact of patriotism on consumer ethnocentric tendencies.

When the comparative perceived vulnerability to a threat is large, the influence of patriotism on consumer ethnocentric tendencies will increase its impact in the relationship. Thus,

H_{2b}: The higher the level of comparative perceived vulnerability to a threat, the greater the positive impact of patriotism on consumer ethnocentric tendencies.

Similarly, when the absolute perceived vulnerability to a threat is small or negligible, the influence of patriotism on consumer ethnocentric tendencies will maintain or reduce the actual relationship. Thus:

H_{3a}: The lower the level of absolute perceived vulnerability to a threat, the similar or smaller the positive impact of patriotism on consumer ethnocentric tendencies.

Finally, when the absolute perceived vulnerability to a threat is large, the influence of patriotism on consumer ethnocentric tendencies will increase its impact in the relationship. Thus,

H_{3b}: The higher the level of absolute perceived vulnerability to a threat, the greater the positive impact of patriotism on consumer ethnocentric tendencies.

Perceived vulnerability to a threat is a bi-dimensional concept. When considering that perceptions of vulnerability are reflections of one's behavior, the two dimensions of vulnerability, absolute and comparative, are part of the consumers' total perceived vulnerability to a threat. Their moderator effect could be together or independent as hypothesized.

Patriotism as predictor of Consumer Ethnocentrism. Patriotism refers to love of one's country. Such love implies bias for one's country (Jordan, 1904) and readiness to sacrifice for it (Han, 1994). Patriots are those who love their country simply because it is their country and because they and their parents have lived there too (Tocqueville, 1956). Eventually, one will learn to love his /her own country; such love is taught, inculcated, and / or acquired. The international marketing literature

includes patriotism as an affective and cognitive factor which influences consumer's emotions toward domestic products (Han, 1988).

The influence of patriotism on consumer ethnocentrism has been suggested since Adorno, et al. (1969) due to its closely linkage with the more general construct of ethnocentrism. The work by Han (1988) is perhaps one of the first attempts to recognize a relationship between consumer patriotism and consumer ethnocentrism. Other recent research has shown that patriotism is related to the consumer ethnocentrism construct as developed by Shimp & Sharma (1987). Korean (Klein & Ettenson, 1999), Turkish (Balabanis, et al., 2001), and U.S. (Sharma, et al., 1995b) patriotism was found to be a principal motivation for consumer ethnocentrism. All those countries have had a stable recent history free of political or economic transformations (Steenkamp, 2001). In these cases, patriotism correlated positively with the consumer ethnocentrism demonstrating its significant influence on consumer ethnocentric tendencies. Thus, for the Mexican sample:

H₄: Patriotism will be positively related to consumer ethnocentrism.

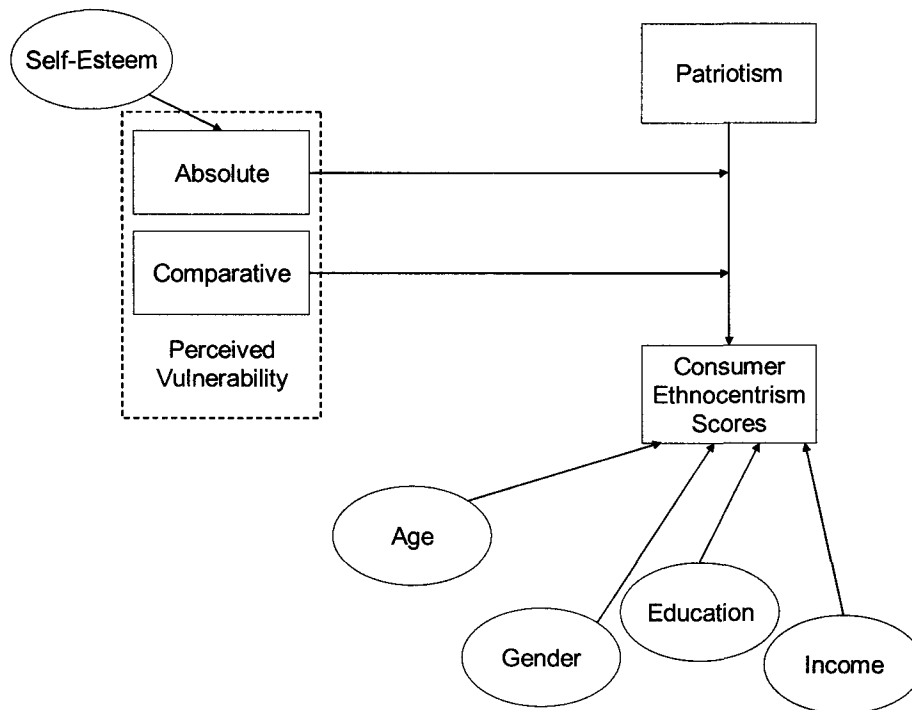
Similarly to Turkey (Kucukcan, 2003) and other countries where the patriotism-consumer ethnocentrism positive relationship was found, Mexicans have had a stable and political history most of the 20th. Century. Therefore, it is expected Mexican consumers will depict a positive relationship between patriotism and consumer ethnocentric tendencies.

Control Variables. The use of control variables in multivariate analysis helps to determine whether the relationship between two variables (e.g. patriotism and

consumer ethnocentric tendencies, or perceived vulnerability and consumer ethnocentric tendencies) is due to factors of interest or to some other factors. Additionally, the use of control variables helps to evaluate if the relationship between the variables is the same for different types of individuals. In this study, the following variables are considered to be controls: age, gender, level of education, income, and self-esteem. The above hypotheses and the control variables with the postulated relationships are summarized in Figure 2.

Figure 2

Expected Links of Patriotism and Perceived Vulnerability with Consumer Ethnocentric Tendencies



RESEARCH METHODOLOGY

One of the easiest ways to communicate a model is to have a picture of it. In this research, the model represented in Figure 2 is an oversimplification of reality in the sense that the model considers only a limited number of variables. That model will be tested empirically using regression analysis. The theory here considered leads us to be interested in how the variables are interrelated and to develop a system of equations which specifies all the causal linkages among the variables. In this case, the proposed research asks how patriotism and perceived vulnerability (with its two dimensions) are related to consumer ethnocentrism.

International marketing researchers use regression analysis to explain a theory in the form of a linear causal model. The theory and the linear causal relationships are included in the stated hypotheses. The variables considered in the model are: patriotism, perceived vulnerability with its two recognized dimensions: absolute and comparative perceived vulnerability, and consumer ethnocentric tendencies, along with five control variables (age, gender, education, income, and self-esteem). Patriotism is proposed as a predictor variable for consumer ethnocentrism with perceived vulnerability as a moderating variable of the relationship.

The proposed framework is analyzed, transforming it into quantitative estimates. To do this, it is necessary to establish the pattern of association of the variables in the desired arrangement. Next, a correlation matrix –using simple correlations of the variables in the model– will measure the magnitude of the effect of one antecedent variable upon the consequent variable. The consumer ethnocentrism

score is the expected outcome of the interaction of the patriotism and perceived vulnerability variables.

The arrows connecting variables indicate the direction of causality, and the letters next to the arrows represent effects in the form of regression coefficients (see Figure 3). Patriotism, absolute perceived vulnerability, and comparative perceived vulnerability are exogenous variables for the model. No arrows come into patriotism and comparative perceived vulnerability; they are not determined by other variables. However, absolute perceived vulnerability is determined by a control variable termed self-esteem. Consumer ethnocentrism score is an endogenous variable; it has arrows coming toward it and is therefore determined, at least in part, by other variables in the model and by four control variables (age, gender, level of education, and income).

The regression equations for the path model are:

$$CET = k' + aPAT + bAPV + aPAT \times bAPV + cCPV + aPAT \times cCPV + dAGE + eSEX + fEDU + gINC + e' \quad (1)$$

$$APV = k'' + hSE + e'' \quad (2)$$

Where:

CET = Consumer Ethnocentrism Tendencies

PAT = Patriotism

CPV = Comparative Perceived Vulnerability

APV = Absolute Perceived Vulnerability

SE = Self-Esteem

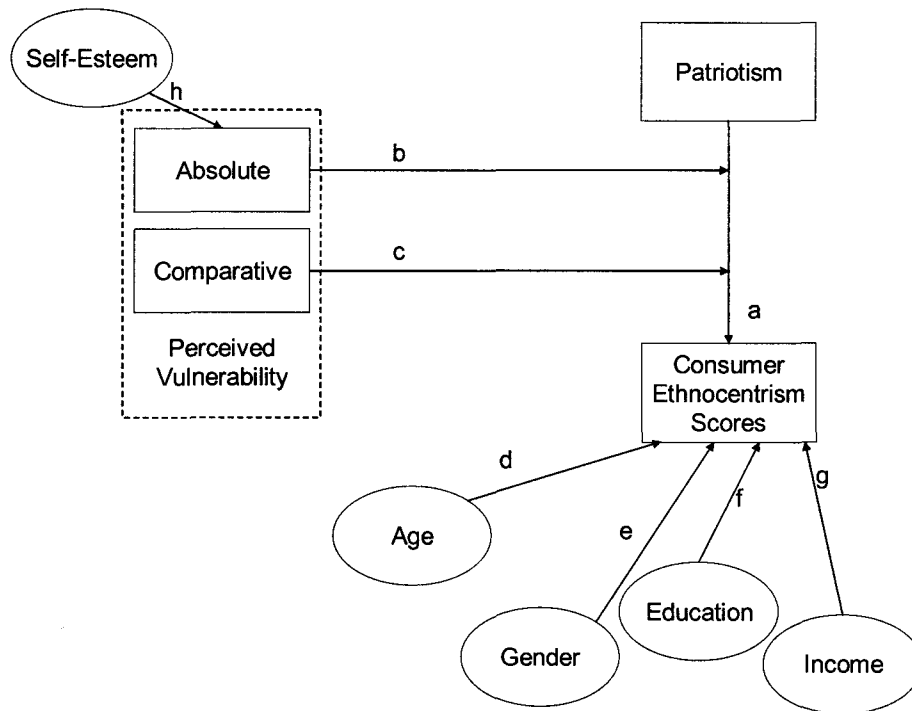
e = error for each equation

$k = \text{intercept}$

It is relevant to remember that the total perceived vulnerability has two dimensions, absolute and comparative perceived vulnerability.

Figure 3

Coefficients the Researched Hypotheses



Operationalization of the Variables

Independent variable: Perceived vulnerability.

Perceived vulnerability has been operationalized in various ways for the health belief model and in the health literature. Researchers have generated specific questions to measure personal vulnerability in every case. Until now, the literature has failed to include a full scale to measure this, because the concept of perceived

vulnerability represents a subjective perceived risk with different cognitive understandings for everyone (Dowling, 1986). There have been some efforts to measure perceived vulnerability under different circumstances. That is the case of Gerrard, Gibbons and their team (Boney-McCoy, et al., 1999; Smith, et al., 1997) who studied perceived vulnerability to a threat to health. Similarly, Weinstein and colleagues (Weinstein, 1980; Weinstein, 1989; Weinstein & Klein, 1995; Weinstein, et al., 2000) studied perceived vulnerability under the optimistic bias approach. In a more specific situation, Laufer & Gillespie (2004) analyzed personal vulnerability to a harm crisis.

Gerrard, et al.'s (1996) mention that most studies of perceived vulnerability under the health and optimistic bias approaches have used some variation of the questions, "What is the likelihood that you will develop a problem?" for absolute perceived vulnerability and "When you compare yourself to the average man, what would you say your chances are of developing a problem?" for comparative perceived vulnerability. Their meta-analysis indicates that the most common response scales for these questions contain 5 points (e.g. 1 = almost certainly will not to 5 = almost certainly will). Lower scores represent smaller levels of vulnerability both in relation to oneself and in comparison to others.

Laufer & Gillespie (2004) measured personal vulnerability using a scale with three items. Laufer & Gillespie's description of personal vulnerability is similar to the absolute perceived vulnerability used in the present research. Although they were interested in the attribution of blame to a particular firm, their measure of personal

vulnerability considers a person's feeling of vulnerability to an unpleasant event: a blowout tire. The scale includes these questions: "Likelihood a tire blowout would occur to oneself," "How concerned a subject was that a tire blowout would occur to oneself," and "How worried was a subject that a tire blowout would occur to himself." Blame was measured on an 11-point scale with 0 representing no blame whatsoever and 10 representing full blame to the firm. Lower scores indicate that one perceives oneself as less vulnerable.

The scales used to measure perceived vulnerability include concepts related to unpleasant events that might happen in the future. The lower scores on the scales represent smaller levels of perceived vulnerability. For the present study, the future unpleasant event is the reduction of well-being resulting from following the normative consumer ethnocentric tendencies, or from preferring products with foreign origin above domestic ones. Thus, to measure absolute and comparative perceived vulnerability the following questions are proposed in order to consider any damage to one's well-being. In this case, well-being refers to one's own interpretation of standard of living and quality of life. To measure comparative perceived vulnerability the following questions are considered:

1. Compared to other people, how likely is it that your standard of living will be damaged when you buy products with foreign origin to domestic ones?
2. Compared to other people, how worried are you that your quality of life will be damaged when you buy products with foreign origin to domestic ones?

3. When you compare yourself to other people, what would you say the chances are of reducing your standard of living when you buy products with foreign origin to domestic ones?
4. When you compare yourself to other people, how concerned are you about damaging your quality of life when you buy products with foreign origin to domestic ones?

To measure absolute perceived vulnerability, these questions are proposed:

1. Considering only yourself, how likely do you think it is that your standard of living will be damaged when you buy products with foreign origin over domestic ones?
2. Considering only yourself, how worried are you that your quality of life will be reduced when you buy products with foreign origin over domestic ones?
3. Considering only yourself, what would you say your chances are of reducing your standard of living when you buy products with foreign origin over domestic ones?
4. Considering only yourself, how concerned are you that your quality of life will be damaged when you buy products with foreign origin over domestic ones?

Both dimensions of perceived vulnerability will be measured with the previously used 5-point scales. The scale used by Smith, et al. (1997) while analyzing comparative perceived vulnerability is thus proposed from “much less likely than others” to “much more likely than others”⁷. In contrast, for absolute perceived vulnerability Boney-McCoy, et al., 1999 (1999) used a scale ranging from “extremely low” to “extremely high”⁸. Both scales are used in this research. Scores

⁷ The 5-points used by Smith, et al. (1997) are 1 = much less likely than others, 2 = a little less likely than others, 3 = similar to others, 4 = a little more likely than others, 5 = much more likely than others.

⁸ Boney-McCoy, et al., 1999 (1999) used a 5-points scale: 1 = extremely low, 2 = a little bit, 3 = somewhat, 4 = very much, 5 = extremely high

are obtained by summing the responses, and lower scores represent low perception of vulnerability.

To measure perceived vulnerability as a whole, two additional questions are proposed that comprise the total perception of vulnerability. To do that, the next two questions are considered:

1. Compared to others, how likely it is that your personal well-being will be harmed when you buy products with foreign origin over the domestic ones?
2. Considering only yourself, how likely it is that your personal well-being will be harmed when you buy products with foreign origin over the domestic ones?

The Spanish version of the previous scales is in Table 1.

Previous to their research use, the new proposed scales need to be validated. Thus, a pilot test was performed with graduate (n=51) and undergraduate students (n=38). The Cronbach's alpha for the absolute perceived vulnerability scale was .84 while for the comparative perceived vulnerability scale was .89. In both cases, the reliability scores are above the accepted value of .70 (Nunnally & Bernstein, 1994). However, the observation made by Netemeyer, Pullig, & Bearden (2002) regarding that "similar worded items will result in a higher coefficient alpha" (p. 124) should be considered. A solution for that is to include in the scale items that keep the psychometric proprieties of the instrument only. In other words, the scale should only include items with high content validity of the measure. The same Netemeyer, et al. (2002) suggest a procedure for the selection of the items. The idea is to have the higher inter-item correlation with the higher alpha. For the pilot test, in both scales,

the higher alpha coefficient with the higher inter-item correlation estimates (absolute = .51; comparative = .63) were obtained considering the five items proposed. No other combination offered higher alphas with higher inter-item correlation estimates. In a similar vein, factor analyzing the same pilot data with principal components method extraction resulted in one single component reflecting the unidimensionality expected for each scale. Thus, as the items proposed to measure the latent constructs of absolute and comparative perceived vulnerability are grounded in past research and theoretical ground, it seems that the internal consistency of the proposed scales reflect the constructs of interest.

Table 1
Perceived Vulnerability

Comparative

1. En comparación con los demás, ¿*considera* que **su estándar de vida se daña** si comprara productos extranjeros en lugar de nacionales?
2. En comparación con los demás, ¿qué tan *preocupado* se encuentra usted de que **su calidad de vida se dañe** si comprara productos extranjeros en lugar nacionales?
3. Cuando se compara usted con los demás, ¿cuál diría que es la *probabilidad* de que **su estándar de vida se reduzca** si comprara productos extranjeros en lugar de nacionales?
4. Cuando se compara usted con los demás, ¿qué tan *intranquilo* se encuentra usted de **dañar su calidad de vida** si comprara productos extranjeros en lugar de nacionales?

Absolute

1. Considerándose únicamente usted, ¿*considera* que **su estándar de vida se daña** si comprara productos extranjeros en lugar de nacionales?
2. Considerándose únicamente usted, ¿qué tan *preocupado* se encuentra usted de que **su calidad de vida se reduzca** si comprara productos extranjeros en lugar de nacionales?
3. Considerándose solamente usted, ¿cuál diría que es la *probabilidad* de que **su estándar de vida se reduzca** si comprara productos extranjeros en lugar de nacionales?
4. Considerándose solamente usted, ¿qué tan *intranquilo* se encuentra usted de **dañar su calidad de vida** si comprara productos extranjeros en lugar de nacionales?

Total

1. Comparándose con los demás, ¿*considera* que **su bienestar personal se daña** si comprara productos extranjeros en lugar de nacionales?
2. Al considerarse exclusivamente usted, ¿*considera* que **su bienestar personal se daña** si comprara productos extranjeros en lugar de nacionales?

Independent variable: Patriotism.

The operationalization of the concept of patriotism is scant in marketing; its most familiar use is related to international marketing. The measure used to operationalize the construct of patriotism is drawn from the literature and had been previously shown to be psychometrically sound. Patriotism is measured on the scale developed by Kosterman & Feshbach (1989). They developed the patriotism scale measuring patriotic attitudes in a sample of U.S. students. The patriotism scale was developed along with five other scales pertaining to feelings toward one's own or other countries⁹. The scales are the result of factor analysis and orthogonal testing. Additionally, discriminant validity was determined for the patriotism scale, along with analysis of variance (ANOVA) with three selected control variables (political party, level of education, and country of birth). Kosterman & Feshbach concluded that the patriotism scale taps the affective component of love of one's country.

Every item included in Kosterman & Feshbach's patriotism scale specifically pertains to love of one's country. The scale included in Table 2 was also used by Balabanis, et al. (2001) to specifically analyze its relationships to consumer ethnocentrism scores. The reliability of the scale was found to be very consistent across the Czech and Turkish samples (Balabanis, et al., 2001), with Cronbach's

⁹ The scales are Nationalism (the view that one's country is superior and should be dominant), Internationalism (attitudes toward other nations), Civil Liberties (individuals' rights to hold certain beliefs or to criticize one's country), World Government (the concept of international authority), and Smugness (the view that one's country, its symbols, and its people are simply the best).

alphas of .82 and .85 correspondingly. However, In both cases, the alphas are well above the commonly accepted value of .70 (Nunnally & Bernstein, 1994).

No research was found using the Kosterman & Feshbach's patriotism scale in Mexico. Thus, to analyze its applicability, the scale was included in the pilot test mentioned earlier. The Cronbah's alpha for the scale was .25 which is low showing problems as a reliable measure. Then, a factor analysis using principal component analysis with Varimax rotation was done to select the items with highest loading factors (DeVellis, 1991). Four components resulted from which only one showed an alpha large enough to be considered (Churchill, Jr. & Iacobucci, 2002). The component included items 1, 2, 4, 5, and 8 which accounted for a Cronbach's alpha of .83. With an alpha of that magnitude, Clark & Watson (1995) state that adding items is of little utility to internal consistency and content validity, particularly with a narrowly defined construct tested in a new market (Netemeyer, et al., 2002b). On the other hand, previous research on consumer ethnocentrism has found that high income consumers show low levels of patriotism resulting also in low levels of consumer ethnocentrism. That condition of high income level is present in the subjects used for the pilot test. The sample of undergraduate and graduate students comes from a private university. In general, these students have a wealthy background, at least above the general population in Mexico. Likely, such condition seems to be part of some of the reliability problems with the patriotism scale. In this study, the Kosterman & Feshbach's 12-item patriotism scale will be used. Further problems

with this scale and other could be encountered and will be handling following procedures to achieve sound reliability.

Table 2
Kosterman & Feshbach's (1989) 12-Item Patriotism Scale

1	I love my country
2	I am proud to be an American
3	In a sense, I am emotionally attached to my country and emotionally affected by its actions
4	Although at times I may not agree with the government, my commitment to the U.S. always remains strong
5	I feel a great pride in that land that is our America
6	It is not that important for me to serve my country
7	When I see the American flag flying I feel great
8	The fact that I am American is an important part of my identity
9	It is not constructive for one to develop an emotional attachment to his/her country
10	In general, I have very little respect for the American people
11	It bothers me to see children made to pledge allegiance to the flag or sing the national anthem or otherwise induced to adopt such strong patriotic attitudes
12	The U.S. is really just an institution, big and powerful yes, but just an institution

Note: The scale used a 5-point Likert type: 1=Strongly Agree, 2=Moderately Agree, 3=Neutral, 4=Moderately Disagree, and 5=Strongly Disagree. Scores range from 12 to 60; it is used reverse code in the questionnaire.

Dependent variable: Consumer ethnocentric tendencies.

For the measurement of consumer ethnocentric tendencies, the Consumer Ethnocentrism Tendency Scale, or CETSCALE, developed by Shimp & Sharma (1987) is proposed (see Table 3). The scale has been extensively used and validated by Netemeyer, et al., 1991a (1991), Durvasula, et al. (1997), and Steenkamp & Baumgartner, 1998 (1998) in Belgium, France, Great Britain, Greece, Japan, Russia, USA, and West Germany.

Table 3
Shimp & Sharma's (1987)17-Item Consumer Ethnocentrism Tendencies Scale
(CETSCALE)

1	American people should buy American-made products instead of imports
2	Only those products that are unavailable in the U.S. should be imported
3	Buy American-made products. Keep America working.
4	American products, first, last, and foremost.
5	Purchasing foreign-made products is un-American.
6	It is not right to purchase foreign products
7	A real American should always buy American-made products
8	We should purchase products manufactured in America instead of letting other countries get rich off us.
9	It is always best to purchase American products.
10	There should be very little trading or purchasing of goods from other countries unless out of necessity.
11	American should not buy foreign products, because it hurts American business and causes unemployment.
12	Curbs should be put on all imports.
13	It may cost me in the long-run but I prefer to support American products.
14	Foreigner products should not be allowed to put their products on our markets.
15	Foreign products should be taxed heavily to reduce their entry into the U.S.
16	We should buy from foreign countries only those products that we cannot obtain within our own country.
17	American consumers who purchase products made in other countries are responsible for putting their fellow Americans out of work.

Note: The scale used a 7-point Likert-type: 7=Strongly Agree, 6=Moderately Agree, 5=Slightly Agree, 4=Neither Agree nor Disagree, 3=Slightly Disagree, 2=Moderately Disagree, 1=Strongly Disagree. Scores range from 17 to 119.

In addition, it has been successfully employed in Australia, Canada, the Czech Republic, Hungary, Korea, Mexico, New Zealand, Poland, Russia, Spain, Turkey, and United Kingdom (Balabanis, et al., 2001; Balabanis & Diamantopoulos, 2004; Chakraborty, Allred, & Bristol, 1996; Clarke, 2001; Ghose & Chandra, 1998; Good

& Huddleston, 1995; Granzin & Olsen, 1998; Herche, 1992, 1994; Johansson, et al., 1994; Lantz & Loeb, 1996; Luque Martínez, et al., 2000; Marcoux, Filiatrault, & Chéron, 1997; Marín & Miquel, 1997; Sharma, et al., 1995b; Supphellen & Rittenburg, 2001; Watson & Wright, 2000; Witkowski, 1998). The Cronbach's alpha for the undergraduate sample (n=36) in the pilot test was .86. For the graduate sample (n=45), the 7-point Likert type used in the original CETSCALE was modified to 5-point obtaining an alpha of .86. In both cases, the alpha is similar to previous research.

Control variables.

Demographic variables. The inclusion of control variables is relevant in considering the impact of the sampling characteristics (Craig & Douglas, 2000). Each control variable has been employed in previous consumer-ethnocentric-tendencies-, or perceived-vulnerability-studies. The use of age as a demographic variable refers to an index of the passing of time measured in years (Birren & Fisher, 1995). In general, gender is understood as a social category (Frable, 1997). The dichotomy in human experience is the basis for the distinction between male and female. Education level refers to the years of education one has completed from primary school to university. Finally, income is the salary of an individual during a period of time (i.e. a week, a month, or the like). The operationalization of the control variables is included in Table 4.

Table 4
Operationalization of the Demographic Variables

1	Age: How old are you in years
2	Gender: Male or Female
3 ^a	Educational Level: How many years of formal education have you had?
4 ^b	Income: What is your monthly household income?
Notes: a. The levels will be base on INEGI's (2003).	
b. This question is based on the Minimum Wage for the area by CONASAMI (2004) and with AMAI's (2004) levels of social class (socio-economic level or SEL).	

Self-esteem. The Rosenberg Self-Esteem Scale, or RSES (Table 5) and the State Self-Esteem Scale, or SSES (Table 6) are considered in order to measure both trait self-esteem and state self-esteem. The RSES has been employed to analyze perceived vulnerability under the health approach, and it is considered appropriate in consumer ethnocentrism research. The SSES will represent a type of self-esteem that can be modified in a particular situation, such as a threat to one's well-being. Both scales will be used in the present study as they represent specific conditions of interest. In the pilot test, the Cronbach's alpha for the RSES (n=59) is .85 and for the SSES (n=81) is .70. In both cases the alpha is reliable enough (Nunnally & Bernstein, 1994) representing a good quality of the measures (Churchill, Jr. & Iacobucci, 2002).

Table 5
Rosenberg's (1965) 10-Item Self-Esteem Scale (RSES)

1	On the whole, I am satisfied with myself
2 ^a	At times, I think am not good at all
3	I feel that I have a good number of qualities
4	I am able to do things as well as most other people
5 ^a	I feel I do not have much to be proud of
6 ^a	I certainly feel useless at times
7	I feel that I'm a person of worth, at least on an equal plane with others
8 ^a	I wish I could have more respect for myself
9 ^a	All in all, I am inclined to feel that I am a failure
10	I take a positive attitude toward myself

Notes: a. Reverse coded.

b. The scale uses a 4-point Likert-type: 1 = Strongly Agree, 2 = Agree, 3 = Disagree, 4 = Strongly Disagree. Scores range from 10 to 40.

Table 6
Heatherton & Polivy's (1991) 20-Item State Self-Esteem Scale (SSES)

1	I feel confident about my abilities
2 ^a	I am worried about whether I am regarded as a success or failure
3	I feel satisfied with the way my body looks right now
4 ^a	I feel frustrated or rattled about my performance
5 ^a	I feel that I am having trouble understanding things I read
6	I feel that others respect and admire me
7 ^a	I am dissatisfied with my weight
8 ^a	I feel self-conscious
9	I feel as smart as others
10 ^a	I feel displeased with my self
11	I feel good about my self
12	I am pleased with my appearance right now
13 ^a	I am worried about what other people think of me
14	I feel confident that I understand things
15	I feel inferior to others at this moment
16 ^a	I feel unattractive
17 ^a	I feel concerned about the impression I am making
18 ^a	I feel that I have less scholastic ability right now than others
19 ^a	I feel like I am not doing well
20 ^a	I am worried about looking foolish

Notes: a. Reverse coded.

b. The scale uses a 5-point Likert type scale: 1 = Not at All, 2 = A Little Bit, 3 = Somewhat, 4 = Very Much, 5 = Extremely. Scores range from 20 to 100.

Translation of the instruments.

Translation equivalence is a major concern in cross-national research. It is necessary to translate the instruments developed in English into the language of the sample. In this case, as the study will be done in Mexico, the instruments should be understood in Spanish and have equivalent meaning in the research context to be studied (Green & White, 1976). To our knowledge, the patriotism scale has not been used in any previous research in Mexico. Only Witkowski (1998) reports the use of the 17-item CETSCALE¹⁰ in Mexico but he fails to include the translated instrument. There is a use of the CETSCALE with Spanish samples (cf. Luque Martínez, et al., 2000; Marín & Miquel, 1997). However, because Mexico and Spain represent two different cultures and there are recognizable language differences between them, it is necessary to translate the instruments with consideration of the Spanish spoken in Mexico and of Mexico's unique culture.

The questionnaires, drafted originally in English, are translated into Spanish by a researcher who is a native speaker of Spanish, the language into which the translation is made. The questionnaires then are back-translated into English by a professional translator and checked for consistency with the original to ensure that any idiomatic or colloquial wording is minimized (Parameswaran & Yaprak, 1987). To minimize difficulties due to translation, the questionnaires are pre-tested on a sample of Mexican students. Students were asked to respond to all measures and to

¹⁰ Both Bailey & Gutierrez de Pineres, 1997 (1997) and Clarke (2001) used the 10-items CETSCALE in Mexico.

indicate any part of the questionnaire they found confusing (Craig & Douglas, 2000). Although minors, the necessary adjustments were made in order to ensure an equivalent translation of the instruments of interest. The final questionnaire is presented in annex A.

Data Collection

The framework in Figure 2 and its corresponding hypotheses (Figure 3) are investigated by studying Mexican consumers. For the present study, the personal interviewing survey technique is selected. Personal interviewing is recognized by Craig & Douglas (2000) as the most flexible method of obtaining research data. The respondent is clearly identified and the sample distribution can be controlled. Personal interviews allow the interviewer to clarify and explain questions if needed. The interview method is less susceptible to social desirability (Crowne & Marlowe, 1960) and both haloing and systematic biases when dealing with issues related to country image, as opposed to other methods such as telephone, mail, or self-administered questionnaires (Malhotra, Agarwal, & Peterson, 1996).

Various survey methods have been used in studying foreign origin products and ethnocentrism. Academics reported collecting their data using probabilistic and non-probabilistic samples. Some examples of the methods reported are self-administrated surveys with graduate and undergraduate students in classrooms (Clarke, 2001; Durvasula, et al., 1997; Netemeyer, et al., 1991a), experiments (Good & Huddleston, 1995), personal interviews (Johansson, et al., 1994; Klein & Ettenson,

1999; Luque Martínez, et al., 2000), mail surveys (Herche, 1992; 1994; Klein, 2002; Steenkamp, et al., 1999; Watson & Wright, 2000), telephone surveys (Han, 1988; Nielsen & Spence, 1997), internet (Lee, et al., 2003), and street and mall personal intercepts (Balabanis, et al., 2001; Keillor & Hult, 1999; Klein, et al., 1998; Piron, 2002; Supphellen & Rittenburg, 2001).

The sample is drawn from consumers waking in a business district area in a capital city in the northeast part of Mexico. Data is collected by the researcher and local collaborators, using the personal interviewing survey method, on the main streets and/or in the squares of the main shopping district in town (Bush & Hair, Jr., 1985). The same procedure was used by Balabanis, et al. (2001) when establishing the significant relationship between patriotism and the CETSCALE. This sampling procedure implies non-probability, and reviews of the literature indicate various forms (e.g. convenience, judgmental, quota) are used in most studies (Albaum & Peterson, 1984; Sin, Cheung, & Lee, 1999). A non-probability sample has been used in many international research studies, and it seems appropriate for this research. To avoid the use of a homogenous sample, in an effort to represent the composition of the city, the sample distribution is close to the actual demographic patterns (Reynolds, Simintiras, & Diamantopoulos, 2002)¹¹. The data was collected in 17 different points of intersection.

¹¹ Data from INEGI (2003) and from AMAI (2004) are used to estimate the sample composition.

Sample Size Determination

A critical question in all research involves the size of the sample. There is no single criterion to establish the necessary sample size. Malhotra, et al., 1996 (1996) maintain that the sample size is generally determined by qualitative considerations such as (1) the importance of the decision, (2) the nature of the research, (3) the number of variables in the model considered, (4) the nature of the analysis, (5) sample size used in other studies, (6) incidence rates, (7) completion rates, and (8) resource constraints (Malhotra, 1999). In comparison, Hair, Jr., Anderson, Tatham, & Black (1998) mention that the factors that impact sample size requirements for a multivariate analysis are (1) model misspecification, (2) model size, (3) departure from normality, and (4) estimation procedure.

The estimation of sample size is a question of the tolerable sample error and the precision of the estimates, taking into consideration the cost of the survey (Lohr, 1999). Sample size provides a basis for the estimation of sampling error. A critical question is how large a sample is needed; the larger the sample size, the smaller the error in the sample estimates (Brock, 2003). For this research, the sample distribution is estimated considering income and level of education (see Table 7) of the Mexican population. The sample size selected is 313. That sample size is similar to the sample size used by Balabanis, et al. (2001) in Turkey. This sample size was selected following Churchill, Jr. & Iacobucci (2002) who mention the possibility to employ a sample size similar to what others have used for similar studies in the past. Despite the possible under optimization of the sample size, this method of selecting the

sample size is psychologically comforting. The distribution based on income (Table 7a) is expected because it offers more statistical description and because it is complex and too complicated to cover all the levels of education (Table 7b).

Determination of the Moderator Effect

The framework suggested by Sharma, Durand, & Gur-Arie, 1981a (1981) to identify moderator variables will be used in this study. Perceived vulnerability is hypothesized to moderate either the form and/or strength of the relationship between patriotism and consumer ethnocentrism (Mathur, 1998; McDonald, 1994; Sproull, 1988). In other words, perceived vulnerability is said to interact with patriotism to enhance predictability of consumer ethnocentrism (Cohen & Cohen, 1983). Sharma, et al.'s (1981) framework (p. 296) consists of four steps.

Step 1. Determine whether a significant interaction is present between the hypothesized moderator variable (i.e. perceived vulnerability) and the predictor variable (i.e. patriotism) by the moderate regression analysis (MRA) procedure (see explanation below). It will necessary to proceed to Step 3, bypassing Step 2, if no significant interaction is found.

Table 7a
Expected Sample Distribution based on Income

Income in '000¹³	SEL¹⁴	Percentage	Male			Female			Sum
			15-29yrs¹⁵	30-44yrs	+45yrs	15-29yrs	30-44yrs	+45yrs	
+ 32	A/B/C+	24.30%	16	12	9	17	12	10	76
10 – 32	C	18.20%	12	9	7	12	9	8	57
6.6 – 10	D+	30.40%	21	15	12	21	15	13	95
-6	D/E	27.10%	18	13	10	18	14	11	85
		100.00%	67	48	38	68	50	41	313

Table 7b
Expected Sample Distribution based on Level of Education

Years	Level	Percentage	Male			Female			Sum
			15-29yrs	30-44yrs	+45yrs	15-29yrs	30-44yrs	+45yrs	
+12	College ¹⁶	16.21%	11	12	6	11	8	3	51
10 – 12	High-School ¹⁷	21.18%	17	10	4	19	12	4	66
7 – 9	Secondary ¹⁸	28.95%	28	14	5	26	12	6	91
-6	Primary	33.65%	11	12	24	12	16	30	105

¹² Population based on INEGI's (2003) definition of Monterrey Metropolitan Area (López Pérez, 2003) which includes nine municipalities (Apodaca, García, General Escobedo, Guadalupe, Juárez, Monterrey, San Nicolás de los Garza, San Pedro Garza García, and Santa Catarina).

¹³ Household income per month.

¹⁴ Socio Economic Levels and percentages from AMAI (2004).

¹⁵ Age in years

¹⁶ Including College, Master, PhD, and equivalent.

¹⁷ Including High School & Technical, Commercial, or Teacher studies with Secondary schooling.

¹⁸ Including Secondary schooling and Technical or Commercial studies with Primary schooling.

Step 2. Determine whether the moderator variable (i.e. perceived vulnerability) is related to the criterion variable (i.e. consumer ethnocentrism). If not, it will be a pure moderator variable¹⁹. If it is, the moderator variable will be a quasi-moderated variable²⁰. In either case, the moderator influences the form of the relationship in the tested model.

Step 3. Determine whether the moderator variable (i.e. perceived vulnerability) is related to the criterion (i.e. consumer ethnocentrism) or predictor (i.e. patriotism) variable. If it is related, perceived vulnerability is not a moderator but an exogenous, predictor, intervening, antecedent, or a suppressor variable. If perceived vulnerability is not related to either the patriotism or consumer ethnocentrism, proceed to Step 4.

Step 4. Split the total sample into subgroups on the basis of the hypothesized moderator variable (i.e. perceived vulnerability). The groups can be formed by a median, quartile, or other type of split. After segmenting the total sample into subgroups, do a test of significance for differences in predictive validity across subgroups. If significant differences are found, perceived vulnerability is a

¹⁹ Perceived vulnerability will be a pure moderator variable if it is not related to either patriotism or consumer ethnocentrism. Rather, perceived vulnerability interacts with patriotism to modify the form of the relationship between patriotism and consumer ethnocentrism.

²⁰ A quasi-moderator variable is identical to a pure moderator variable except that the former not only interacts with the predictor variable but is a predictor variable itself. If that is the case in here, perceived vulnerability will not be considered as a moderator by the psychometric literature.

homologizer²¹ variable operating through the error term. If no significant differences are found, perceived vulnerability is not a moderator variable and the analysis conclude.

Moderated Regression Analysis

The moderated regression analysis or MRA is an analytical approach which maintains the integrity of the sample while provides a basis for controlling the effects of a moderator variable. This analysis involves prediction equations for the total sample and do not require explicit subgrouping or differentiating of individuals (Zadeck, 1971b). The analysis consists of examining three regression equations for equality of the regression coefficients.

$$CETS = a + b_1PAT \quad (3)$$

$$CETS = a + b_1PAT + b_2PV \quad (4)$$

$$CETS = a + b_1PAT + b_2PV + b_3PATxPV \quad (5)$$

If equation 4 and 5 are not significantly different (i.e. $b_2 \neq 0$; $b_3 = 0$), perceived vulnerability (PV) is not a moderator variable but an independent predictor variable. For PV to be a pure moderator variable, equations 3 and 4 should not be different but should be different form equation 5 (i.e. $b_2 = 0$; $b_3 \neq 0$). For PV to be a quasi moderator variable, equations 3, 4, and 5 should be different form each other (i.e. $b_2 \neq$

²¹ A homologizer is one of the moderator variables in the Sharma, et al.'s (1981) typology. As a homologizer variable, perceived vulnerability is a type of moderator which influences the strength of the patriotism-consumer ethnocentrism relationship, does not interact with patriotism, and is not significantly related to either patriotism and consumer ethnocentrism.

0; $b_3 \neq 0$). To test the moderator effect of the two dimensions of perceived vulnerability, similar equations with similar restrictions considering APV and CPV are pondered for analysis.

Despite the assertion made by Sharma, et al. (1981) regarding the scant use of MRA in marketing related studies, several studies are found using it recently. Slater & Narver (1994) used this approach to ascertain whether competitive environment was a significant moderator of the relationship of market orientation and performance. However, on a later paper using MRA Matsuno & Mentzer (2000) determined that the strategy type moderates the relationship between market orientation and performance considering that “prior research has been equivocal” (p. 1). Bougie, Pieters, & Zeelenberg (2003) also used the MRA procedure to identify anger as a moderator between service encounter dissatisfaction and customers’ behavioral responses. Using the MRA, Sharma, et al. (1995) tested that the impact of consumer ethnocentric tendencies on attitudes toward importing products into Korea would be moderated by the perceived necessity of the imported item and by the perceived degree of personal and economic threat imposed by the imported item. Low & Mohr (2001) found that group involvement does moderate the effects of complexity and rationality of decision style on the use of marketing information. Many other marketing studies have used the MRA approach to identify moderator variables in the models analyzed since Sharma, et al. (1981) demonstrating its usefulness and acceptance in the field.

RESULTS AND DISCUSSION

Characteristics of the Sample

The demographic characteristics of the sample are found in Table 8 and Table 9. The results are the key measures for the pooled sample of 313 respondents. Several values are particularly noteworthy. The average income is between Level 7 and level 8²² representing SEL D+ where most of the population concentration (30.4%) was expected (see Table 7a). Despite that fact, the sample income distribution is comparable to the general population (AMAI, 2004). The respondents' average level of education represents a level bit higher than high-school (12 years) despite a large proportion of the population has lower level of education (see Table 7b). This represents that visitors to the commercial districts seem to be more educated than the average population. The sample's female/male ration is very similar to the same ration in the general population. Similarly, the age distribution of the sample follows a comparable distribution as the general population (INEGI, 2003).

The descriptive analysis is found in the second part of Table 9 showing the coefficient reliability alphas, the mean scores and the standard deviation for each variable. In all the cases the Cronbah's alpha are higher than the commonly accepted value of .70 (Nunnally & Bernstein, 1994). The only exception is the Kosterman & Feshbach's (1989) 12-Item Patriotism scale which in the pilot test showed the same problems. Rather, the five items with alpha large enough to be considered in the

²² The levels are related to the values used in the questionnaire: Level 7 (\$7,980.01 y \$9,310.00) and Level 8 (\$9,310.01 y \$10,640.00). Values are in Mexican Pesos per month.

study obtained by factor analysis in the pilot test correspond to the patriotism reduced scale which also accounted for a high alpha with the sample here used. In general, the Cronbah's alphas show higher values than the ones obtained in the pilot test for most of the variables (see Table 10).

Table 9
Sample Characteristics

	Min	Max	Mean	SD
Demographics				
Age	15	77	31.57	13.06
Income ^a	1	13	7.58	3.46
Education (years)	0	22	12.25	4.18
Gender				
Male	47.9%			
Female	52.1%			
<hr/>				
		Reliability	Mean	SD
Variables^b				
Patriotism (12)		0.5316	39.88	4.888
Patriotism Reduced (5)		0.9023	20.99	3.842
CETSCALE (17)		0.9418	78.92	23.099
Perceived Vulnerability (10)		0.9199	24.69	8.806
Absolute (5)		0.9009	11.60	5.089
Comparative (5)		0.8831	13.09	4.564
Self-Esteem				
RSES (10)		0.8361	18.03	5.126
SSES (20)		0.7721	71.85	9.849
<hr/>				
a. Income levels correspond to values in questionnaire.				
b. Items in parenthesis				
<hr/>				

Table 8
Actual Sample Distribution

Income in '000		SEL	Percentage	Population			Population			Sum
				485,706	347,008	272,474	490,579	359,819	298,739	
				Male			Female			
				15-29yrs	30-44yrs	+45yrs	15-29yrs	30-44yrs	+45yrs	
+32	A/B/C+	24.30%		16	1	5	11	4	3	40
11 – 32	C	18.20%		24	18	10	31	11	10	104
6.6 – 10	D+	30.40%		14	14	3	20	8	7	66
-6	D/E	27.10%		25	12	8	29	17	12	103
		100.00%		79	45	26	91	40	32	313

Table 10
Pilot Test Characteristics^a

Variables ^b	N	Reliability	Mean	SD
Patriotism (12)	89	0.25	32.53	3.31
Patriotism Reduced (5)	89	0.83	8.15	2.95
CETSCALE (17) ^c	38	0.86 ^d	57.08 ^e	13.73
Perceived Vulnerability (10)	89	0.87	18.80	6.34
Absolute (5)	89	0.84	8.19	3.75
Comparative (5)	89	0.89	10.61	3.84
Self-Esteem				
RSES (10)	89	0.70	13.13	4.21
SSES (20)	89	0.82	74.60	7.47

a. The test was done with students (38 undergraduate and 51 graduate)

b. Items in parenthesis

c. A 5-point Likert scale was used for the CETSCALE tested with graduate students.

d. There was found no difference with the CETSCALE coefficient alpha for both undergraduate and graduate students.

e. For graduate students Mean = 38.88, SD = 9.20

The mean CETSCALE score of 78.92 in Table 9 is higher than scores obtained by other researchers. In Shimp & Sharma (1987) the scores ranged from a high 68.58 to a low 56.62 for four USA samples. Marín & Miquel (1997) obtained a score of 66.38 in Spain. In Hungary and México, Witkowski (1998) obtained the scores of 50.7 and 76.5 respectively. The sample analyzed seems to be more ethnocentric than their counterparts in the USA, Spain, and Hungary. However, Witkowski (1998) scores of Mexico are similar to the CETSCALE obtained in this study.

Hypothesis Test

Test of moderator.

Moderated regression analysis (MRA) was used as explained in the Research Methodology chapter to test H_{1a} to H_{3b}. These hypotheses posited that the impact of patriotism (PAT) on consumer ethnocentric tendencies (CET) would have an effect moderated by the intensity of perceived vulnerability (PV) to a threat. Next, an explanation of the steps applying MRA (see above) follows.

The equations for each of the three factors analyzed are found in Table 11 following the model in Figure 2. Model **a** includes the total perceive vulnerability (TPV) variable, model **b** considers the absolute perceived vulnerability (APV) dimension, and model **c** incorporates the comparative perceived vulnerability (CPV) dimension. For each model, different sets of regression equations are analyzed following the MRA. Equation 3 is common to the three models. The equations analyzed in the three models are similar to equations 3, 4, and 5 described earlier in the methodology chapter.

Equations 4 represent the model considering the impact of patriotism and perceived vulnerability on the consumer ethnocentric tendencies. The dependent variable is consumer ethnocentric tendencies and the independent variables are patriotism and perceived vulnerability. On the other hand, equations 5 include the same variables plus the effect of the perceived vulnerability factor with its interaction between patriotism and consumer ethnocentrism (PATxPV). Equations' 3 and 4 coefficients (b_1 and b_2) are significant ($p = .000$) implying that both independent

variables have an effect on the dependent one. However, when the interaction of the independent variables is added (equations 5), the effect of perceived vulnerability is not significant for CET values.

Table 11
Moderator Regression Analysis Results

		a	b ₁	b ₂	b ₃	R ²
(3)	CET = a + b ₁ PAT	22.599	1.412			0.089
	<i>p</i> level	0.029	0.000			
Model a						
(4a)	CET = a + b ₁ PAT + b ₂ TPV	5.217	1.330	0.837		0.191
	<i>p</i> level	0.606	0.000	0.000		
(5a)	CET = a + b ₁ PAT + b ₂ TPV + b ₃ PATxTPV	36.067	0.564	-0.408	0.006	0.230
	<i>p</i> level	0.003	0.056	0.195	0.000	
Model b						
(4b)	CET = a + b ₁ PAT + b ₂ APV	12.131	1.290	1.323		0.174
	<i>p</i> level	0.225	0.000	0.000		
(5b)	CET = a + b ₁ PAT + b ₂ APV + b ₃ PATxAPV	39.594	0.614	-1.068	0.112	0.214
	<i>p</i> level	0.001	0.035	0.090	0.000	
Model c						
(4c)	CET = a + b ₁ PAT + b ₂ CPV	3.634	1.403	1.476		0.174
	<i>p</i> level	0.726	0.000	0.000		
(5c)	CET = a + b ₁ PAT + b ₂ CPV + b ₃ PATxCPV	35.924	0.603	-0.931	0.114	0.221
	<i>p</i> level	0.004	0.045	0.126	0.000	

The effect of the patriotism and perceived vulnerability interaction is analyzed in equations 5. The results in the three models are similar. Now, perceived vulnerability is not significant ($p > .050$) while the interaction has become significant. Moreover, the significant level of patriotism diminishes as the p levels increase but still are below an acceptable value of $p < .060$. However, the interaction significant level ($p = .000$) indicates a moderator effect. Moderation is indicated when the interaction between perceived vulnerability and patriotism is statistically significant (Sharma, et al., 1981a). In this case, perceived vulnerability, total and its two

dimensions, is found to be a pure moderator variable. The interaction of both patriotism and perceived vulnerability factors has a positive effect on the influence of patriotism on consumer ethnocentric tendencies due to the positive value of the interaction coefficients, i.e. b_3 in equations 5.

Once the interaction effect is found and the moderator effect has been established, the type of moderator variable is ascertained. The relationship is established analyzing the correlations of the dependent variable (CET) and the purposed moderated factors. As can be seen in Table 12, perceived vulnerability, total and its two dimensions, is significantly related ($p = .000$) to the CET scores. Hence, perceived vulnerability is considered a pure moderator variable and influences the relationship included in equations 5. As perceived vulnerability is not statistically related to CET, MRA Step 3 is skipped while Step 4 is no longer necessary due to the interaction analyzed is found to be a pure moderator variable. In order to prevent the unique relation between the predictor variable and the dependent variable and to assure their quality, an additional test shows that patriotism and perceived vulnerability with its two dimensions fail to evince multicollinearity problems (VIF = 1.000).

By following the MRA procedure above, the evidence indicates that perceived vulnerability is a pure moderator variable that affects the impact of patriotism on consumer ethnocentric tendencies. The impact of the interaction by both perceived vulnerability and patriotism seems to be positive. As patriotism has a positive impact on consumer ethnocentrism, having a high level of patriotism will have a positive

impact on ethnocentrism increasing its level. According to the analysis, perceived vulnerability interacts with patriotism to influence its impact on the ethnocentrism level. Thus, the interaction of the two factors impacts positively the positive impact of patriotism on consumer ethnocentrism. The aforementioned provides support for hypotheses H_{1b}, H_{2b}, and H_{3b}. As competitive hypotheses, H_{1a}, H_{2a}, and H_{3a} are rejected due to the positive influence of the interaction of interest.

Table 12
Correlations with CETSCALE

Factors	r	p level
Age	.197	.000
Gender	.012	.839
Education	-.222	.000
Income	-.324	.000
Patriotism Reduced	0.374	.000
Perceived Vulnerability	0.335	.000
Absolute	0.316	.000
Comparative	0.294	.000

The results indicate that the modeling in Figure 2 represents the moderating effect of perceived vulnerability to a threat due to the consumer's preference for domestic products above imports. Indeed, the findings support the conception that perceived vulnerability has an impact on the interaction between patriotism and ethnocentrism. Thus, despite the direct and positive effect of the level of patriotism on the level of consumer ethnocentrism, such impact is tempered by the moderating effect of perceived vulnerability. The evidence indicates that one's beliefs about the likelihood of being affected by an event (i.e. perceived vulnerability, total and its two

dimensions: absolute and comparative) is a relevant factor which affects the interaction.

Consumers modify their levels of ethnocentrism considering other aspects besides patriotism such as perceived vulnerability to a threat. As ethnocentric consumers perceive themselves vulnerable to a threat, their ethnocentric scores are increased. Such response seems to reduce the consumer's vulnerability feeling. However, those responses will depend on cognitive factors such as personality and attitude to the world as seen by the consumer.

Patriotism factor.

Table 13 gives the correlations between CET and the variables postulated in the model presented in Figure 2. In support of hypotheses H₄, the correlation between patriotism and consumer ethnocentricity is predictably positive ($r = .304, p = .000$), which indicates the individuals who love their country are ethnocentric. The regression analysis of the two variables (equation 3 in Table 11) also supports H₄ ($b = 1.412, p = .000, R^2 = .089$). Due to the positive correlation between the two factors, when the love for one's country increases, the preference for domestic products will also be augmented.

The influence of patriotism in consumer ethnocentrism was also established by other researchers in different countries. Samples from Korea (Sharma, et al., 1995b), Turkey (Balabanis, et al., 2001), and the USA (Shimp & Sharma, 1987) obtained similar results. In general, countries in which the evidence indicates an

influence of patriotism on ethnocentrism depict long time country stability (cf. Balabanis, et al., 2001). Mexican consumers belong to a country which has been politically and socially stable since the 1920's. The lack of significance between patriotism and consumer ethnocentrism found by Balabanis, et al. (2001) with the Czech sample is attributable to recent social and political changes which are not present in Mexico.

Table 13
Correlation of the Variables

	PAT	APV	CPV	TPV
CET	.374	.316	.294	.335
<i>p level</i>	.000	.000	.000	.000
PAT		.026	-.034	-.002
<i>p level</i>		.642	.548	.966
APV			.664	.922
<i>p level</i>			.000	.000
CPV				.902
<i>p level</i>				.000

Control Variables

Demographic characteristics are related differently to consumer ethnocentrism. Table 14 shows the descriptive statistics of the control variables included in the model from Figure 2. Four demographic variables are analyzed: sex, age, education, and income. Two scales of self-esteem are included, the Rosenberg Self-Esteem Scale (RSES) and the State Self-Esteem Scale (SSES). The sample has a distribution which evidenced a similar distribution of the general population (see Table 7a and Table 8). Similarly, the sub-sample for each segment of the control variables shows an acceptable size for statistical analysis.

Table 14
Descriptive Statistics of the Control Variables and their Correlation with CETSCALE

	n	Min	Max	Mean	SD	r	p level
Gender						.012	.839
Male	150	22	119	78.62	22.80	na	Na
Female	163	22	119	79.17	23.41	na	Na
Age						.197	.000
15-29	170	22	119	74.72	22.40	-.089	.248
30-44	85	22	119	81.45	24.86	.136	.215
+44	58	34	119	87.45	19.56	-.051	.705
Education						-.222	.000
0-6	36	34	119	84.67	23.14	-.383	.021
7-9	55	45	119	90.95	17.90	-.273	.043
10-12	76	22	119	78.84	22.79	.177	.125
+12	146	22	119	72.99	23.04	.106	.202
Income						-.324	.000
-6.6	103	27	119	87.22	20.47	-.104	.296
6.6-10	66	34	119	81.79	19.53	-.078	.535
10-32	104	22	119	74.35	24.70	.001	.995
+32	40	23	118	64.60	21.38	-.360	.022
RSES						0.034	.544
High	150	19	40	22.50	3.05	-0.136	0.097
Low	163	10	18	13.91	2.54	0.092	0.241
SSES						0.022	.703
High	179	72	92	79.13	4.84	-0.09	0.233
Low	134	44	71	62.13	5.44	0.059	0.501

Demographic factors.

Gender. The analysis for each control variables indicates particular interactions with consumer ethnocentrism. Gender of the consumer is not statistically significant with ethnocentrism ($r = .012, p = .839$, see Table 14). Similar lack of significance was previously found using a Czech sample by Balabanis, et al. (2001).

Contrastingly, Balabanis, et al. (2001), Lee, et al. (2003), Sharma, et al. (1995) found gender to be statistically significant for a Turkish sample and for two different USA samples correspondingly. However, similar to Balabanis, et al.'s (2001), Nielsen & Spence's (1997), and Sharma, et al.'s (1995) findings, females are found to depict higher levels of CETSCALE than males.

Furthermore, the dispersion of the CETSCALE scores, the standard deviation, for both genders shows almost no difference. Redundantly to the no correlation significance obtained, one-way Analysis of Variance, or ANOVA, (Table 15) shows that differences between males and females are not statistically significant ($F = .041$, $p = .839$) for CETSCALE too. Thus, for the Mexican sample, gender fails to be a predictor of ethnocentric scores while the same scores do not depend on the sex of the consumers. This evidence indicates that Mexicans, males and females, have comparable preferences for domestic products above imports despite females show a higher preference average for domestic products than males.

Table 15
Control Variables with CETSCALE

	<u>One-Way ANOVA</u>					
	Age	Gender	Education	Income	RSES	SSES
<i>F</i>	7.589	.041	9.666	12.518	.907	.520
<i>sig.</i>	.001	.839	.000	.000	.342	.472
<i>eta</i> ²	.047	.000	.086	.108	.003	.002

Age. The whole sample correlates positively and is statistically significant with ethnocentrism despite, individually, each age-group correlation fails to be statistically significant (Table 14). Witkowski (1998) found that age also correlates

positively and is significant with CETSCALE for a Mexican sample. Similar findings for a US and a Turkish sample were done by Nielsen & Spence (1997) and Balabanis, et al. (2001). Older age-groups reported higher mean levels of CETSCALE. As consumer age, the level of preference for domestic products above imports tends to increase. Indeed, the older age-group (+44 years) shows the smaller standard deviation, thus that age-group tend to have less disperse ethnocentric levels.

In average, the CETSCALE scores are different between the three age groups considered. Comparison of each age group mean using one-way ANOVA (Table 15) indicates that the three groups differ, statistically speaking, in some way ($F = 7.589$, $p = .001$). The measure of association (η^2) between age and CETSCALE shows that 4.7% of the variance in the CETSCALE scores can be explained by age groups. Two additional post-hoc tests were performed using Tukey and Scheffé tests.

The two post-hoc tests completed are similar, versatile, for equal or unequal sample sizes, and compute a single critical difference regardless of whether the means compared are immediately adjacent or not. While the Tukey test uses the studentized t tables, Scheffé test uses the F tables and is more conservative. The Scheffé test lowers the Type I error and is stricter than the Tukey test (Bruning & Kintz, 1977). Researchers have suggested the use of both tests (cf. Pedhazur & Schmelkin, 1991 and Urdan, 2001). For the significant correlated control variables (i.e. age, education and income), both post-hoc tests are found in Table 16.

The Tukey and Scheffe's tests indicate that, on average, the younger group (15-29 years old) is statistically significant ($p = .001$) different from the older group

(+ 44 years old). However, the evidence fails to establish the same significant effect between the other age groups. Previous research and theory have not specified age groups; such analysis was done considering young and old consumers without identifying age ranges. It is likely that the lack of significance between the median and older age group averages is the result of the cut-off points used in this study. Despite the aforementioned, as in previous studies, Mexican consumers show higher levels of ethnocentrism as they age. Hence, older Mexican consumers tend to be more ethnocentric than younger.

Table 16
Post-Hoc Tests with Multiple Comparisons for Groups
of Selected Control Variables (*p*-values)

	<u>Age</u> (years)					
	30-44			+44		
	Tukey HSD ^a			Scheffé ^b		
15-29	.065	.001		.081	.001	
30-44		.270			.303	

	<u>Level of Education</u> (years)					
	7-9	10-12	+12	7-9	10-12	+12
	Tukey HSD ^a			Scheffé ^b		
0-6	.551	.571	.026	.628	.646	.048
7-9		.012	.000		.026	.000
10-12			.240			.319

	<u>Income</u> (thousand Mexican Pesos per month)					
	6.6-10	10-32	+32	6.6-10	10-32	+32
	Tukey HSD ^a			Scheffé ^b		
-6.6	.403	.000	.000	.489	.001	.000
6.6-10		.134	.001		.196	.002
10-32			.081			.129

a. *p*-values from *t*-tables obtained with Tukey's honestly significant difference test

b. *p*-values from *F*-tables obtained with Scheffé test.

Education. Level of education is divided in four groups, as in Table 7b, influencing negatively consumers' ethnocentric tendencies. Likewise, Table 14 shows the two lower groups, primary (0 – 6 years) and secondary (7 – 9 years) levels, and the whole sample which correlate negatively with CETSCALE and are statistically significant ($p < .05$). Higher levels of education, high-school (10 – 12 years) and college (+ 12 years), fail to correlate with CETSCALE. Similar negative correlation and significance were found by Sharma, et al. (1995) with a Korean sample. Higher levels of education show smaller levels of CETSCALE. Indeed, based on the findings, it is asserted to mention that as consumers are getting more educated, their level of ethnocentrism diminishes.

In average, the CETSCALE scores are different between the four levels of education considered. One-way ANOVA (Table 15) indicates that the four levels differ in some way ($F = 9.666, p = .000$). The measure of association (η^2) between education and CETSCALE shows that 8.6% of the variance in the CETSCALE scores can be explained by level of education. Additional post-hoc tests (Table 16) indicate that, on average, primary and college levels are statistically different ($p < .050$). Also, secondary is statistically different from higher high-school and college levels ($p < .050$ and $p = .000$ respectively).

The evidence fails to establish the same significant effect between primary and secondary and between primary and high-school levels. Finally, on the average, the high-school level is not significantly different from the college's CETSCALE scores. Prior studies state that as consumers are more educated depict lower levels of

ethnocentrism (e.g. Sharma, et al., 1995b) without specifying educational levels. It is likely that the lack of significance between some levels is the result of the cut-off points used in this study which are specific for Mexico. The evidence indicates that Mexican consumers show lower levels of preferences for domestic products above imports as they become more educated.

Income. The evidence indicates that higher the income, consumers will have a better perception of foreign made products, thus lower levels of ethnocentrism. Conversely, lower levels of income shows high levels of ethnocentrism tendencies. The whole sample level of income correlates negatively with CETSCALE ($r = -.324$, $p = .000$, Table 14). Analogous findings were done using Korean (Sharma, et al., 1995b), Czech and Turkish (Balabanis, et al., 2001), and USA samples (Lee, et al., 2003). Analyzing independently, only the highest (A/B/C+) socio economic level (SEL) correlates significantly ($p < .050$) negative with CETSCALE. The lower three (C, D+, and D/E) SELs fail to correlate with the ethnocentric tendencies scores.

The average CETSCALE scores are different between the four SELs. One-way ANOVA (Table 15) shows that the four SELs differ in some way ($F = 12.518$, $p = .000$) between them. The measure of association (η^2) between income and CETSCALE shows that 10.8% of the variance in the CETSCALE scores can be explained by the level of income. Additional post-hoc tests (Table 16) indicate that some of the SELs' mean scores are statistically different between them. The D/E level is significantly different ($p < .010$) than the A/B/C and C+ levels. On the other hand, the D+ level is also significantly different to the A/B/C+ level.

The evidence fails to establish any other significant CESCALE scores difference between any other SELs. Past studies have evidenced that as consumers have highest levels of income, their CETSCALE scores are lowered. It is likely that the lack of significance between some levels is the result of the cut-off points used in this study which are specific for Mexico (AMAI, 2004; INEGI, 2003). Despite the aforementioned, Mexican consumers show lower levels of preferences for domestic products above imports as they become wealthier.

The findings of this study portray the characteristics of the Mexican ethnocentric consumers. The evidence indicates that Mexican males and females depict similar ethnocentric tendencies. On the other hand, Mexican ethnocentric consumers tend to be adults with low levels of both education and income. Separately, both lower educated and high income consumers will show high levels of ethnocentrism. Hence, young, educated and wealthy Mexicans tend to have lower levels of preference for domestic products above imports. Despite the unique characteristics of the countries, the ethnocentric tendencies found in other countries seem to prevail in Mexico too.

The post-hoc analyses shed some light on the differences between the demographic characteristics of specific Mexican consumer segments. The younger Mexican ethnocentric consumer is different from the older one. The primary school ethnocentric consumer differs from the high-school and preparatory ones. Similarly, the high-school ethnocentric consumer is different from the preparatory consumer. Low income (D/E) Mexican ethnocentric consumers are different from the wealthiest

(C and A/B/C+) ones, while medium income (D+) ethnocentric consumers differ from the wealthiest (A/B/C+) as well. All these findings give additional characteristics of the consumer with ethnocentric tendencies to those found in previous studies.

Self-esteem factor.

Two different scales to measure self-esteem were used in the analysis. Each of them measure self-esteem differently. The scales are analyzed dividing low and high levels of self-esteem. Also, two different correlation analyses are done. The first with CETSCALE (see Table 14) and the second with perceived vulnerability and its two dimensions (Table 17). Additionally, one-way ANOVA is also performed for the same variables (Table 18).

Table 17
Correlations between Self-Esteem Scales and Perceived Vulnerability

	<u>Total</u>			<u>High</u>			<u>Low</u>		
	APV	CPV	TPV	APV	CPV	TPV	APV	CPV	TPV
RSES									
r	.154	.166	.175	.026	.007	.019	.135	.103	.131
p level	.006	.003	.002	.751	.935	.820	.087	.190	.097
SSES									
r	-.193	-.171	-.200	-.202	-.139	-.190	-.233	-.186	-.231
p level	.001	.002	.000	.007	.063	.011	.007	.031	.007

The RSES is considered a scale measuring trait self-esteem which represents a personal trait which is established and maintained in adulthood. On the other hand, SSES is designed to measure the current self-esteem state considering one's feeling of self-worth. RSES and SSES fail to correlate with CETSCALE (Table 14); indeed,

neither of the levels (high and low) correlates with ethnocentrism. Therefore, CETSCALE scores do not follow consumer's self-esteem level. Contrastingly, the correlation of self-esteem scales with perceived vulnerability gives a different occurrence (see Table 17).

Table 18
Self-Esteem with Perceived Vulnerability

		<u>One-Way ANOVA</u>		
		APV	CPV	TPV
<u>RSES</u>				
	<i>F</i>	5.413	8.404	8.134
	<i>Sig.</i>	.021	.004	.005
	<i>eta</i> ²	.017	.026	.025
<u>SSES</u>				
	<i>F</i>	2.969	3.458	3.848
	<i>sig.</i>	.086	.064	.051
	<i>eta</i> ²	.009	.011	.012

Self-esteem measures correlate with total perceived vulnerability and its two dimensions, absolute and comparative ($p < .010$). Interestingly enough, RSES correlates positively while SSES correlates negatively. Thus, as subjects increase their self-esteem established and maintained in adulthood, they will portray higher perceptions of vulnerability. Furthermore, when the perceived vulnerability scores are categorized by high and low values (Table 17) using the mean as a cut-off point, only SSES values present significant correlations

SSES negatively correlates with total perceived vulnerability and its two dimensions ($p < .050$) for consumers with low levels of SSES. Similarly, only the absolute perceived vulnerability dimension negatively correlates ($p < .010$) with those consumers showing high levels of SSES. The negative correlation found in the

aggregate is also present in the high and low self-esteem state values. Base on the evidence, SSES seems to be a reasonable predictor of total and absolute perceived vulnerability.

Table 18 includes the one-way ANOVA analysis of self-esteem and perceived vulnerability. The mean low and high scores of RSES are significantly different between them ($p < .050$). The levels of perceived vulnerability for low and high self-esteem individuals are statistically different. In a contrarily manner, low and high SSES scores fail to differ from each other ($p > .005$). The measure of association (η^2) between self-esteem measures and perceived vulnerability is very low, ranging from 1.1% to 2.6%, explaining a small part of the variance in the perceived vulnerability scores by the level of self-esteem. A final analysis shows that RSES and SSES correlate negatively ($r = -.634, p = .000$) and both have no multicollinearity problems with perceived vulnerability ($VIF = 1$). The correlation between the two self-esteem measures is strong ($r > .5$). This finding indicates that the two scales analyzed move in opposite directions; thus, when RSES scores increase, SSES decreases or when SSES increases RSES scores decrease.

The inclusion of self-esteem as a control variable in the model analyzed in Figure 2 pursues previous evidence (cf. Gerrard, et al., 2000b; Smith, et al., 1997). Here, the findings indicate that Mexicans levels of self-esteem correlates with the level of perceived vulnerability. However, the two self-esteem measures used indicate that perception of vulnerability will vary positively when the self-esteem considered is the one established and maintained in adulthood (RSES) and negatively

considering one's feeling of self-worth (SSES). Thus, subjects with high levels of self-esteem will perceive their vulnerability depending on their feeling of self-worth or on their established esteem. As one increases, the other decreases. Similarly, low and high levels of self-esteem will perceive vulnerability differently.

Limitations and Further Research

No study is free of different kind of limitations. A limitation of this study is its cross-sectional design. Though the inclusion of control variables will help to understand some alternative explanations for the findings, others will not be so readily noticed. An important step for further research is the collection and analysis of longitudinal data to discover other alternative explanations.

Another area that deserves further attention is the sample used. Although the sample purposed is comparable to what others researchers have employed, it is limited only to a city and will not reflect the whole country, Mexico. Moreover, as the city selected to collect the sample is in Northern Mexico, it is very likely that the population characteristics will be different form the rest of the country limiting the findings to the population analyzed. Further research must take additional care to consider a representative broader sample to understand better Mexican patriotism and its influence on consumer ethnocentrism.

The sampling method purposed could fail to represent properly the desire sample. Although the sample method proposed is similar to previous research, the sample characteristics slightly differs from the expected distribution. However, the

sample seems to be similar to the general population. In any case, further research should consider additional sample methods that better fit the demography of the consumers analyzed. For instance, while doing the field work, additional effort could be put to look for specific ranges of age, gender, and income levels. However, the time and cost constraints are always present.

The pilot test showed a less than desired reliability of the patriotism scale. To our knowledge, the Kosterman & Feshbach's (1989) patriotism scale has never been used in Mexico. Actually, its use in marketing is scant too. However, it has been used by Balabanis, et al. (2001) testing the relationship of patriotism and consumer ethnocentrism. In any case, two considerations are pondered here. First, the pilot test used a very specific sample, students, with little variability of demographics which in turn could result in problem for the scale. Second, Netemeyer, et al. (2002) demonstrated the possibility to reduce a scale without compromising its psychometric properties. As has been demonstrated above, the reduced scale of patriotism, following the method suggested by Netemeyer, et al. (2002), resulted in appropriate levels of reliability and internal consistency. The reduced patriotism scale used in the sample also exhibited similar levels of reliability and internal consistency. Further research of the patriotism construct and its measurement in marketing will enlighten its use.

Finally, the topic of social desirability (Crowne & Marlowe, 1960) has almost not previously been researched on consumer ethnocentrism. Social desirability is commonly understood as the tendency to project favorable images of oneself during

social interaction. Hult, Keillor, & Lafferty (1999) offer findings suggesting that the personality trait to report information that is social desirable on consumer ethnocentrism appears to be different for males and females. In general, persons scoring high on social desirability tend to over-report socially desirable and under-report socially undesirable information about themselves (Johnson, Fendrich, & Hubbell, 2002). As most of the scales used in this study could be considered as social desirable, further research will require the inclusion of scales which account for social desirability to examine any bias.

The constructs and variables included in this study cannot be considered exhaustive. Other constructs such as nationalism, internationalism, cosmopolitanism, allocentrism and dogmatism (Adorno, et al., 1969, Balabanis, et al., 2001, Sharma, et al., 1995b) may be related to consumer ethnocentrism. Among other variables to ponder are marital status and number of recent visits to the downtown area (Bush & Hair, Jr., 1985). Marital status is a common variable used for segmentation in Mexico. Their inclusion in the model analyzed requires additional development of theory.

The previous limitations can be viewed as trade-offs to the advance in the field. In marketing, as most research is done in the USA, relatively little research attempts to examine international marketing issues on the basis of data collection in other countries. Future research will confirm the hypotheses here tested, the constructs stated and their measurement using multicountry data. This research highlights the importance of examining consumer research in other countries. The

major propose of this study is not to develop or test psychometrically rigorous scales but to test the proposed hypotheses using a Mexican sample. In the final analysis, any problems with scale reliability merely render conservative the strength of the observed effects.

Managerial Implications

This study will hold several implications for marketing practice. First, companies will need to decide the degree of ethnocentrism with which they which to be associated. This study attempts to examine the roles of globalization process of the consumer ethnocentric tendencies. Goods are produced and sold in diverse international markets (Levitt, 1983), understanding consumers' perceptions of a firm's products (to gain consumers' favor) can make the difference between firms' success and failure in specific markets. In a market like Mexico where many firms, products, and brand encounter, companies will need to act according to what the consumer believes.

Second, proving that consumer ethnocentrism can be measure through the CETSCALE in Mexico reinforces the use of this already valid and reliable instrument. Companies and researchers have a valuable instrument to use in other countries. Additionally, other measurements used here like patriotism and perceived vulnerability have a good chance of extend their use in additional markets.

Third, governments, agencies and non- governmental organizations will have a better understanding of the levels of ethnocentrism of their consumers. Consumers

are constantly reminded, mainly through advertisements, to feel guilty about the negative and unpatriotic consequences of purchasing foreign made products. The “made in” government advertising campaign is the classical example of incitement to patriotism through favoring in-group products.

Forth, consumer ethnocentrism provides marketers with a useful concept for understanding why consumers buy domestic products rather than imports. Additionally, considering consumers’ perceived vulnerability, marketers can better understand why some segments of consumers prefer domestic products whereas others care about other characteristics for their preference.

Fifth, this research provides useful information to importers and exporters in selecting target markets and formulating marketing plans and strategies. The prejudice against imports represents a great opportunity for domestic firms above international ones. Identifying the segments and characteristics of consumers who are more ethnocentric represents an advantage for domestic firms which will be hard to overcome by foreigners. Also, domestic firms can use the advantage of patriotic events to attract more ethnocentric consumers. However, domestic firms need to identify the consumer’s perceived vulnerability which in turn will help to improve their products offering what the consumers consider is similar or equivalent to the offering made by international firms.

Overall, studies of consumer ethnocentrism suggest the need for firms to develop a richer understanding of how current and prospective consumers in international or global markets react to goods imported. The actual evidence

indicates that consumers' beliefs are significantly influenced by factors other than the quality, price, or characteristics of the products. Thus, firms can obtain better knowledge using the instruments here employed while identify countries, regions, markets, or specific segments where to gain the consumer's favor for their products. This will represent the overcome of a trade barrier which in the past has been overlooked.

Summary of the Analysis and Discussion

This study examines the moderator effect of perceived vulnerability to a threat in its relationship between patriotism and consumer ethnocentrism tendencies. Perceived vulnerability is conceptualized as a total effect or divided in two recognizable dimensions, absolute and comparative. Perceived vulnerability is a concept that needs to be considered in the relationship between patriotism and consumer ethnocentric tendencies. Perceived vulnerability and its two dimensions are shown to be a pure moderator variable boosting the already positive influence of patriotism on the ethnocentric tendencies. Mexicans males and females exhibit comparable preferences for domestic products but females show higher CETSCALE scores while low educated adults with low income tend to be highly ethnocentric. Additionally, the consumer ethnocentric tendencies clearly differ between specific segments such as young and adults, low educated with medium educated and low income with higher income. Moreover, Mexicans self-esteem evidenced a significant relationship with total perceived vulnerability and its two dimensions. That said, the

implication for managers is that they should seek to detect what is the consumer's preference of domestic products above imports and which are the threats perceived to affect one's standard of living and quality of life.

Annex A
Questionnaire in Spanish

Agradecemos mucho su participación en esta encuesta.

Estamos conduciendo una investigación entre personas que vivan en Monterrey. El objetivo de esta investigación es conocer tu opinión con respecto a la actitud que tiene hacia los productos nacionales y los productos extranjeros. Su opinión es muy importante ya que ayudará a establecer cuál es la importancia que los consumidores mexicanos le damos a los productos nacionales.

Contestar esta encuesta tomará solo unos minutos. Todas las respuestas son confidenciales.

Es importante seguir todas las instrucciones y contestar todas las preguntas. Las respuestas deben reflejar solamente su forma de pensar. No hay respuestas incorrectas.

Por favor marque con una X al valor de 1 a 7 que **mejor refleje su forma de pensar**.

Todas las respuestas son válidas; no hay respuestas incorrectas.

Solamente nos interesa como califica Usted a cada enunciado.

Esto refleja su forma de pensar

	Esto refleja su forma de pensar						
	Poco						Mucho
1. Los mexicanos debemos comprar productos hechos en México en lugar de productos importados	1	2	3	4	5	6	7
2. Se deben de importar solo aquellos productos que no se puedan encontrar México	1	2	3	4	5	6	7
3. Al comprar productos hechos en México se mantiene a los mexicanos trabajando	1	2	3	4	5	6	7
4. Los productos mexicanos, primero, al último y siempre.	1	2	3	4	5	6	7
5. Comprar productos hechos en el extranjero no es de los mexicanos	1	2	3	4	5	6	7
6. No es correcto comprar productos extranjeros	1	2	3	4	5	6	7
7. Un verdadero mexicano debe comprar siempre productos hechos en México	1	2	3	4	5	6	7
8. Debemos comprar productos manufacturados en México en lugar de permitir que otros países se hagan ricos a nuestras expensas	1	2	3	4	5	6	7
9. Siempre es mejor comprar productos mexicanos	1	2	3	4	5	6	7
10. Se debe de tener poco comercio o compra de artículos de otros países excepto cuando se tenga la necesidad de ellos	1	2	3	4	5	6	7
11. Los mexicanos no deben comprar productos importados ya que daña a los negocios mexicanos y causa desempleo	1	2	3	4	5	6	7
12. Se deben limitar todas las importaciones	1	2	3	4	5	6	7
13. Puede ser que me cueste a mi en el largo plazo, pero prefiero apoyar a los productos mexicanos	1	2	3	4	5	6	7
14. Se le debe prohibir a los extranjeros que coloquen productos en nuestros mercados	1	2	3	4	5	6	7
15. Los productos extranjeros deben tener altos impuestos para reducir su entrada a México	1	2	3	4	5	6	7
16. Deberíamos comprar de otros países solamente aquellos productos que no se pueden obtener en nuestro país	1	2	3	4	5	6	7
17. Los consumidores mexicanos que compran productos hechos en otros países son responsables de poner a sus compatriotas mexicanos en el desempleo.	1	2	3	4	5	6	7

Por favor asigne una X al valor de 1 a 5 que mejor refleje su forma de pensar.

Todas las respuestas son válidas; no hay respuestas incorrectas.

Solamente nos interesa como califica Usted a cada enunciado.

Nivel de acuerdo con su forma de Pensar

	Completamente de Acuerdo	De Acuerdo	Neutral	En Desacuerdo	Completamente en Desacuerdo
1. Yo amo a mi país	1	2	3	4	5
2. Estoy orgulloso de ser mexicano	1	2	3	4	5
3. En cierto sentido estoy emocionalmente ligado a mi país y emocionalmente afectado por sus acciones	1	2	3	4	5
4. A pesar de que en ocasiones puedo no estar de acuerdo con el gobierno, mi compromiso con México es siempre fuerte	1	2	3	4	5
5. Siento un gran orgullo por esa tierra que es nuestro México	1	2	3	4	5
6. No es tan importante para mi servir a mi país	1	2	3	4	5
7. Me siento bien cuando veo la bandera mexicana ondear	1	2	3	4	5
8. El hecho de que yo sea mexicano es una parte importante de mi identidad	1	2	3	4	5
9. No es constructivo para uno mismo desarrollar un apego emocional con su país	1	2	3	4	5
10. En general, tengo muy poco respeto por los mexicanos	1	2	3	4	5
11. Me molesta ver a los niños jurar a la bandera o cantar el himno nacional o todo lo que induzca a adoptar fuertes actitudes patrióticas	1	2	3	4	5
12. México es solamente una institución, grande y poderosa, pero sólo una institución	1	2	3	4	5

Por favor asigne una X al valor de 1 a 5 que **mejor refleje su forma de pensar**.
 Todas las respuestas son válidas; no hay respuestas incorrectas.
 Solamente nos interesa como califica Usted a cada enunciado.

Esto Refleja su Forma de
Pensar

	Para Nada	Un Poco	Algo	Mucho	Completamente
1. Me siento confiado de mis habilidades	1	2	3	4	5
2. Estoy preocupado acerca de si considerarme exitoso o fracasado	1	2	3	4	5
3. Me siento satisfecho con la forma en que mi cuerpo se ve ahorita.	1	2	3	4	5
4. Me siento frustrado o molesto con mi desempeño	1	2	3	4	5
5. Siento que estoy teniendo problemas para entender las cosas que leo	1	2	3	4	5
6. Siento que otros me admiran y respetan	1	2	3	4	5
7. Estoy inconforme con mi peso	1	2	3	4	5
8. Me siento consiente de mi mismo	1	2	3	4	5
9. Me siento igual de inteligente que los demás	1	2	3	4	5
10. Siento desagrado conmigo mismo	1	2	3	4	5
11. Me siento bien acerca de mi mismo	1	2	3	4	5
12. Estoy satisfecho de mi apariencia actual	1	2	3	4	5
13. Me preocupa lo que otros piensen de mi	1	2	3	4	5
14. Me siento confiado en que entiendo las cosas	1	2	3	4	5
15. En este momento me siento inferior a otros	1	2	3	4	5
16. Me siento poco atractivo	1	2	3	4	5
17. Me siento preocupado por la impresión que estoy dando	1	2	3	4	5
18. Siento que ahorita tengo menos habilidades académicas que los demás	1	2	3	4	5
19. Siento que no la estoy haciendo bien	1	2	3	4	5
20. Me preocupa verme como un tonto	1	2	3	4	5

Por favor asigne una X al valor de 1 a 4 que **mejor refleje su forma de pensar**.

Todas las respuestas son válidas; no hay respuestas incorrectas.

Solamente nos interesa como califica Usted a cada enunciado.

	Nivel de Acuerdo con su forma de Pensar			
	Completamente de Acuerdo	De Acuerdo	En Desacuerdo	Completamente en Desacuerdo
1. En general, yo estoy satisfecho conmigo mismo	1	2	3	4
2. Algunas veces creo que soy un bueno para nada	1	2	3	4
3. Considero que tengo un buen número de cualidades	1	2	3	4
4. Soy capaz de hacer las cosas tan bien como la mayoría de la gente	1	2	3	4
5. Siento que no tengo mucho de que estar orgulloso	1	2	3	4
6. Pienso que en definitiva algunas veces soy un inútil	1	2	3	4
7. Siento que soy una persona de valor, cuando menos al mismo nivel que los demás	1	2	3	4
8. Desearía poder tener mas respeto por mi mismo	1	2	3	4
9. En conjunto, me inclino a sentir que soy un fracaso	1	2	3	4
10. Yo tomo una actitud positiva de mi mismo	1	2	3	4

Por favor asigne una X al valor de 1 a 5 que **mejor refleje su forma de pensar**.

Todas las respuestas son válidas; no hay respuestas incorrectas.

Solamente nos interesa como califica Usted a cada enunciado.

	Muy poco o nada	Un Poco	Algo	Bastante	Mucho
1. Considerándose únicamente usted, <i>¿considera que su estándar de vida se dañe</i> si comprara productos extranjeros en lugar de nacionales?	1	2	3	4	5
2. Considerándose únicamente usted, <i>¿qué tan preocupado se encuentra usted de que su calidad de vida se reduzca</i> si comprara productos extranjeros en lugar de nacionales?	1	2	3	4	5
3. Considerándose solamente usted, <i>¿cuál diría que es la probabilidad de que su estándar de vida se reduzca</i> si comprara productos extranjeros en lugar de nacionales?	1	2	3	4	5
4. Considerándose solamente usted, <i>¿qué tan intranquilo se encuentra usted de dañar su calidad de vida</i> si comprara productos extranjeros en lugar de nacionales?	1	2	3	4	5
5. Al considerarse exclusivamente usted, <i>¿considera que su bienestar personal se dañe</i> si comprara productos extranjeros en lugar de nacionales?	1	2	3	4	5

	Mucho menos que a los demás	Un poco menos que a los demás	Igual que a los demás	Un poco mas que a los demás	Mucho mas que a los demás
1. En comparación con los demás, <i>¿considera que su estándar de vida se dañe</i> si comprara productos extranjeros en lugar de nacionales?	1	2	3	4	5
2. En comparación con los demás, <i>¿qué tan preocupado se encuentra usted de que su calidad de vida se dañe</i> si comprara productos extranjeros en lugar nacionales?	1	2	3	4	5
3. Cuando se compara usted con los demás, <i>¿cuál diría que es la probabilidad de que su estándar de vida se reduzca</i> si comprara productos extranjeros en lugar de nacionales?	1	2	3	4	5
4. Cuando se compara usted con los demás, <i>¿qué tan intranquilo se encuentra usted de dañar su calidad de vida</i> si comprara productos extranjeros en lugar de nacionales?	1	2	3	4	5
5. Comparándose con los demás, <i>¿considera que su bienestar personal se dañe</i> si comprara productos extranjeros en lugar de nacionales?	1	2	3	4	5

Ahora, por favor díganos algo de usted llenando los espacios o seleccionando la opción que mejor lo describa:

1. Su edad en años cumplidos _____ años

2. Sexo: 1. Masculino
 2. Femenino

3. ¿Cuántos años de estudios ha completado? _____ años

4. Nos interesa saber cada cuál es el ingreso mensual de su familia/domicilio al mes

- 1. Hasta \$1,330.00 por mes
- 2. Entre \$1,330.01 y \$2,660.00
- 3. Entre \$2,660.01 y \$3,990.00
- 4. Entre \$3,990.01 y \$5,320.00
- 5. Entre \$5,320.01 y \$6,650.00
- 6. Entre \$6,650.01 y \$7,980.00
- 7. Entre \$7,980.01 y \$9,310.00
- 8. Entre \$9,310.01 y \$10,640.00
- 9. Entre \$10,640.01 y \$11,970.00
- 10. Entre \$11,970.01 y \$13,300.00
- 11. Entre \$13,300.01 y \$31,920.00
- 12. Entre 31,920.01 y \$81,130.00
- 13. Mas de \$81,130.01 por mes

Agradecemos mucho su colaboración....

Reference List

- Abel, M. H. (1997) 'The Role of Self-Esteem in Typical and Atypical Changes in Expectations', *The Journal of General Psychology* 124(1): 113-127.
- Adorno, T.W., Frenkel-Brunswik, E., Levinson, D.J., and Sanford, R.N. (1969) *The Authoritarian Personality*, W. W. Norton & Company, Inc.: New York.
- Albaum, G. and Peterson, R. A. (1984) 'Empirical Research in International Marketing 1976-1982', *Journal of International Business Studies* Spring-Summer: 161-173.
- AMAI (2004) 'Niveles Socioeconómicos', *Asociación Mexicana de Agencias de Investigación de Mercado y Opinión Pública, AC*: [www document] www.amai.org (accessed 3 October 2004).
- Aulakh, P. S. and Kotabe, M. (1993) 'An Assessment of Theoretical and Methodological Development in International Marketing: 1980-1990', *JIM Journal of International Marketing* 1(2): 5-28.
- Bagozzi, R. P. and Heatherton, T. F. (1994) 'A General Approach to Representing Multifaceted Personality Constructs: Application to State Self-Esteem', *Structural Equation Modeling* 1(1): 35-67.
- Bailey, W. and Gutierrez de Pineres, S. A. (1997) 'Country of Origin Attitudes in Mexico: The Malinchismo Effect', *Journal of International Consumer Marketing* 9(3): 25-41.
- Balabanis, G. and Diamantopoulos, A. (2004) 'Domestic Country Bias, Country-of-Origin Effects, and Consumer Ethnocentrism: A Multidimensional Unfolding Approach', *Journal of the Academy of Marketing Science* 32(1): 80-95.
- Balabanis, G., Diamantopoulos, A., Mueller, R. D., and Melewar, T. C. (2001) 'The Impact of Nationalism, Patriotism and Internationalism on Consumer Ethnocentric Tendencies', *Journal of International Business Studies* 32(1): 157-175.
- Baron, R. M. and Kenny, D. A. (1986) 'The Moderator-mediator Variable Distinction in Social Psychological Research: Conceptual, Strategic, and Statistical Considerations', *Journal of Personality and Social Psychology* 51(6): 1173-1182.

- Baumeister, R. F., Campbell, J. D., Krueger, J. I., and Vohs, K. D. (2003) 'Does High Self-Esteem cause better Performance, Interpersonal Success, Happiness, or Healthier Lifestyles?', *Psychological Science in the Public Interest* 4(1): 1-44.
- Birren, J. E. and Fisher, L. M. (1995) 'Aging and Speed of Behavior: Possible Consequences for Psychological Functioning', *Annual Review of Psychology* 46: 329-353.
- Boney-McCoy, S., Gibbons, F. X., and Gerrard, M. (1999) 'Self-Esteem, Compensatory Self-Enhancement, and the Consideration of Health Risk', *Personality and Social Psychology Bulletin* 25(8): 954-965.
- Bougie, R., Pieters, R., and Zeelenberg, M. (2003) 'Angry Customers don't come back, They get back: The Experience and Behavioral Implications of Anger and Dissatisfaction in Services', *Journal of the Academy of Marketing Science* 31(4): 377
- Brock, J. K.-U. (2003) 'The 'Power' of International Business Research', *Journal of International Business Studies* 34: 90-99.
- Browne, M.W. and Cudeck, R. (1993) 'Alternative Ways of Assessing Model Fit' in K.A. Bollen and J.S. Long (eds.) *Testing Structural Equation Models*, Sage Publications: Newbury Park, pp. 136-162.
- Bruning, J.L. and Kintz, B.L. (1977) *Computational Handbook of Statistics*, Scott, Foresman and Company: Glenview, Ill., USA.
- Bush, A. J. and Hair, J. F., Jr. (1985) 'An assessment of the mall intercept as a data collection method', *Journal of Marketing Research* 22(2): 158-167.
- Byrne, B.M. (1998) *Structural Equation Modeling with LISREL, PERILS, and SIMPLIS: basic Concepts, Applications, and Programming*, Lawrence Erlbaum Associates: Mahwah, New Jersey.
- Chakraborty, G., Allred, A. T., and Bristol, T. (1996) 'Exploring Consumers Evaluation of Counterfeits: The Roles of Country of Origin and Ethnocentrism', *Advances in Consumer Research* 23: 379-384.
- Chao, P. (1993) 'Partitioning Country of origin Effects: Consumer Evaluations of a Hybrid Product', *JIBS Journal of International Business Studies* 24(2): 219-306.
- Chasin, J. B. and Jaffe, E. D. (1979) 'Industrial Buyer Attitudes Towards Goods Made in Eastern Europe', *Columbia Journal of World Business* 14(2): 74-81.

- Churchill, G.A., Jr. and Iacobucci, D. (2002) *Marketing Research: Methodological Foundations*, Harcourt College Publishers: Fort Worth, TX.
- Clark, L. A. and Watson, D. (1995) 'Construct Validity: Basic Issues in Objective Scale Development', *Psychological Assessment* 7(3): 309-319.
- Clarke, I. I. (2001) 'Extreme response style in cross-cultural research', *International Marketing Review* 18(3): 301-324.
- Cohen, J. and Cohen, P. (1983) *Applied Multiple Regression/Correlation Analysis for Behavioral Sciences*, Lawrence Erlbaum Associates, Publishers: Hillsdale, NJ.
- Craig, C.S. and Douglas, S. (2000) *International Marketing Research*, Wiley: New York.
- Crowne, D. P. and Marlowe, D. (1960) 'A New Scale of Social Desirability Independent of Psychopathology', *Journal of Consulting Psychology* 24(4): 349-354.
- DeVellis, R.F. (1991) *Scale Development, Theory and Applications*, Sage: Newbury Park, CA.
- Doob, L.W. (1964) *Patriotism and Nationalism: Their Psychological Foundations*, Yale University Press: New Haven.
- Dowling, G. R. (1986) 'Perceived Risk: The Concept and Its Measurement', *Psychology & Marketing* 3(3): 193-210.
- Druckman, D. (1994) 'Nationalism, patriotism, and group loyalty: A social psychological perspective', *International Studies Quarterly* 38: 43
- Durvasula, S., Andrews, J. C., Lysonski, S., and Netemeyer, R. G. (1993) 'Assessing the cross-national applicability of consumer behavior models: A model of attitude toward advertising in general', *Journal of Consumer Research* 19(4): 626
- Durvasula, S., Andrews, J. C., and Netemeyer, R. G. (1997) 'A Cross-Cultural Comparison of Consumer Ethnocentrism in the United States and Russia', *Journal of International Consumer Marketing* 9(4): 73-93.
- Durvasula, S., Andrews, J. C., and Netemeyer, R. G. (1993) 'Assessing the Cross-national Applicability of Consumer Behavior Models: A Model of Attitude toward Advertising in General', *JCR Journal of Consumer Research* 19(4): 626-636.

- Eagly, A.H. and Shelly, C. (1993) *The Psychology of Attitudes*, Harcourt Brace Jovanovich College Publishers: San Diego, CA.
- Erickson, B.H. and Nosanchuk, T.A. (1992) *Understanding Data*, Sage: Newbury Park, Ca.
- Erickson, G. M., Johansson, J. K., and Chao, P. (1984) 'Image Variables in Multi-Attribute Product Evaluations: Country-of-origin Effects', *Journal of Consumer Research* 11(2): 694-699.
- Ettenson, R. and Klein, J.G. (2002) 'The Fallout from French Nuclear Testing in the South Pacific: A Longitudinal Study of Consumer Boycotts'.
- Fishbein, M. and Ajzen, I. (1975) *Belief, Attitude, Intention, and Behavior: An Introduction to Theory and Research*, Addison-Wesley Pub. Co.: Reading, Mass.
- Fiske, S.T. and Taylor, S.E. (1991) *Social Cognition*, McGraw-Hill: New York.
- Frale, D. E. S. (1997) 'Gender, Racial, Ethnic, Sexual, and Class Identities', *Annual Review of Psychology* 48: 139-162.
- Gerrard, M. (1991) 'Effects of reviewing risk-relevant behavior on perceived vulnerability among women marines', *Health Psychology* 10(3): 173-179.
- Gerrard, M., Gibbons, F. X., and Bushman, B. J. (1996a) 'Relation Between Perceived Vulnerability to HIV and Precautionary Sexual Behavior', *Psychological Bulletin* 119(3): 309-409.
- Gerrard, M., Gibbons, F. X., Reis-Bergan, M., and Russell, D. W. (2000b) 'Self-esteem, Self-Serving Cognitions, and Health Risk Behavior', *Journal of Personality* 68(6): 1177-1201.
- Ghose, N. and Chandra, A. (1998) 'Ethnocentrism, Country-of-Origin Image, and Indian Consumer Perceptions: Health Care Products', *Marketing Advances in Theory, Practice and Education, the Proceedings of the Society for Marketing Advances Conference* : 132-136.
- Good, L. K. and Huddleston, P. (1995) 'Ethnocentrism of Polish and Russian Consumers: Are Feeling and Intentions Related?', *International Marketing Review* 12(5): 35-48.

- Granzin, K. L. and Olsen, J. E. (1998) 'Americans' Choice of Domestic over Foreign Products: A Matter of Helping Behavior?', *Journal of Business Research* 43(1): 39-54.
- Green, R. T. and White, P. D. (1976) 'Methodological Considerations in Cross-National Consumer Research', *Journal of International Business Studies* 7(2): 81-88.
- Gürhan-Canli, Z. and Maheswaran, D. (2000) 'Cultural Variations in Country of Origin Effects', *Journal of Marketing Research* 27(August): 309-317.
- Hair, J.F., Jr., Anderson, R.E., Tatham, R.L., and Black, W.C. (1998) *Multivariate Data Analysis*, Prentice Hall: Upper Saddle River, NJ.
- Han, C. M. (1988) 'The Role of Consumer Patriotism in the Choice Domestic versus Foreign Products', *Journal of Advertising Research* 28(3): 25-32.
- Han, C.M. (1994) 'Assessing the Roles of Cognitions, Country of Origin, Consumer Patriotism, and Familiarity in Consumer Attitudes Toward Foreign Brands', *Proceedings of the Asia Pacific Annual Conference of the Association for Consumer Research*, pp. 103-108.
- Han, C. M. and Terpstra, V. (1988) 'Country-of-origin Effects for Uni-national and Bi-national Products.', *JIBS Journal of International Business Studies* 19(2): 235-255.
- Hansen, F. (1972) *Consumer Choice Behavior: A Cognitive Theory*, Free Press: New York.
- Heatherton, T. F. and Polivy, J. (1991) 'Development and Validation of a Scale for Measuring State Self-esteem', *Journal of Personality and Social Psychology* 60(6): 895-910.
- Herche, J. (1992) 'A Note on the Predictive Validity of the CETSCALE', *Journal of the Academy of Marketing Science* 20(3): 261-264.
- _____ (1994) 'Ethnocentric Tendencies, Marketing Strategy and Import Purchase Behaviour', *International Marketing Review* 11(3): 4-16.
- Hofstede, G. (1983) 'The Cultural Relativity of Organizational Practices and Theories.', *Journal of International Business Studies* 14(Fall): 81-89.

- Horn, J. L. and McArdle, J. J. (1992) 'A Practical and Theoretical Guide to Measurement Invariance in Aging Research', *Experimental Aging Research* 18(3): 117-144.
- Huber, J. and McCann, J. (1982) 'The Impact of Inferential Beliefs on Product Evaluations', *Journal of Marketing Research* 19(August): 342-333.
- Hui, C. H. and Triandis, H. C. (1985) 'Measurement in Cross-Cultural Psychology: A Review and Comparison of Strategies', *Journal of Cross-Cultural Psychology* 16(June): 131-152.
- Hult, G. T. M., Keillor, B. D., and Lafferty, B. A. (1999) 'A Cross-National Assessment of Social Desirability Bias and Consumer Ethnocentrism', *Journal of Global Marketing* 12(4): 29-43.
- INEGI (2003) 'XII censo de población y vivienda 2000', *Instituto Nacional de Estadística Geografía e Informática*: [www document] www.inegi.gob.mx (accessed 3 October 2004).
- Irvine, S.H. and Carroll, W.K. (1980) 'Testing and Assessment Across Cultures: Issues in Methodology and Theory' in H.C. Triandis and J.W. Berry (eds.) *The Handbook of Cross-Cultural Psychology*, Allyn and Bacon: Boston, MA., pp. 127-180.
- Jacoby, J., Johar, G. V., and Morrin, M. (1998) 'Consumer Behavior: A Quadrennium', *Annual Review of Psychology* 49: 319-344.
- Jaffe, E. D. and Martínez, C. R. (1995) 'Mexican Consumer Attitudes Toward Domestic and Foreign Made Products', *Journal of International Consumer Marketing* 7(3): 7-27.
- Johansson, J. K., Ronkainen, I. A., and Czinkota, M. R. (1994) 'Negative Country-of-Origin Effects: The Case of the New Russia', *Journal of International Business Studies* 25(1): 157-176.
- Johnson, T.P., Fendrich, M., & Hubbell, A. (2002) 'A Validation of the Crowne-Marlowe Social Reliability Scale', Proceedings of the 57th Annual Meeting of the American Association for Public Opinion Research. St. Pete Beach, Florida, pp. 1661-1666.
- Jordan, A. (1904) 'The Bias of Patriotism', *International Journal of Ethics* 15(1): 1-27.

- Jöreskog, K.G. and Sörbom, D. (1993) *LISREL 8: Structural Equation Modeling with the SIMPLIS Command Language*, Scientific Software International: Chicago.
- Keillor, B. D. and Hult, G. T. M. (1999) 'A five-country study of national identity - Implications for international marketing research and practice', *International Marketing Review* 16(1): 65-82.
- Kerlinger, F. N. (1967) 'Social Attitudes and their Critical Referents: A Structural Theory', *Psychological Review* 74: 110-122.
- Klein, J. G. (2002) 'Us versus Them, or Us Versus Everyone? Delineating Consumer Aversion to Foreign Goods', *Journal of International Business Studies* 33(2): 345-363.
- Klein, J. G. and Ettenson, R. (1999) 'Consumer Animosity and Consumer Ethnocentrism: An Analysis of Unique Antecedents', *Journal of International Consumer Marketing* 11(4): 5-24.
- Klein, J.G., Ettenson, R., and Krishhnan, B. (2000) 'Extending the Construct of Consumer Ethnocentrism: When Foreign Products Are Preferred'.
- Klein, J. G., Ettenson, R., and Morris, M. D. (1998) 'The Animosity Model of Foreign Product Purchase: An Empirical Test in the People's Republic of China', *Journal of Marketing* 62(1): 89-100.
- Korman, A.K. (1974) *The Psychology of Motivation*, Prentice-Hall: Englewood Cliffs, N. J.
- Kosterman, R. and Feshbach, S. (1989) 'Toward a Measure of Patriotic and Nationalistic Attitudes', *Political Psychology* 10(2): 257-274.
- Kucukcan, T. (2003) 'State, Islam, and Religious Liberty in Modern Turkey: Reconfiguration of Religion in the Public Sphere', *Brigham Young University Law Review* 2: 475-506.
- Lantz, G. and Loeb, S. (1996) 'Country of Origin and Ethnocentrism: An Analysis of Canadian and American Preferences using Social Identity Theory', *Advances in Consumer Research* 23: 374-378.
- Laufer, D. and Gillespie, K. (2004) 'Differences in Consumer Attributions of Blame between Men and Women: The Role of Perceived Vulnerability and Empathic Concern', *Psychology & Marketing* 21(2): 141

- Lee, C. and Green, R. T. (1991) 'Cross-Cultural Examination of the Fishbein Behavioral Intentions Model', *Journal of International Business Studies* 22(2): 289-306.
- Lee, R. E., III and Warr, P. B. (1969) 'The Development and Standardization of the Balanced F-Scale', *The Journal of General Psychology* 81: 109-129.
- Lee, W.-N., Hong, J.-Y., and Lee, S.-J. (2003) 'Communication with American Consumers in the Post 9/11 Climate: An Empirical Investigation of Consumer Ethnocentrism in the United States', *International Journal of Advertising* 22(4): 487-510.
- Levinson, D.J. (1969) 'The Study of Ethnocentrism Ideology' in T.W. Adorno, E. Frenkel-Brunswik, D.J. Levinson, and R.N. Sanford (eds.) *The Authoritarian Personality*, W. W. Norton & Company, Inc.: New York, pp. 102-150.
- Levitt, T. (1983) 'The Globalization of Markets', *Harvard Business Review* 61(May-June): 92-102.
- Lewis, I.M. (1985) *Social Anthropology in Perspective: The Relevance of Social Anthropology*, Cambridge University Press: New York.
- Linton, K. E. and Marriott, R. G. (1996) 'Self-esteem in Adolescents: Validation of the State Self-esteem Scale', *Personality and Individual Differences* 21(1): 85-90.
- Lohr, S.L. (1999) *Sampling: Design and Analysis*, Brooks/Cole Publishing Company: Pacific Grove, CA.
- Low, G. S. and Mohr, J. J. (2001) 'Factors affecting the Use of Information in the Evaluation of Marketing Communications Productivity', *Journal of the Academy of Marketing Science* 29(1): 70-88.
- Luque Martínez, T., Ibañez Zapata, J. A., and del Barrio García, S. (2000) 'Consumer Ethnocentrism Measurement: An Assessment of the Reliability and Validity of the CETSCALE in Spain', *European Journal of Marketing* 34(11/12): 1353-1374.
- Malhotra, N.K. (1999) *Marketing Research: An Applied Orientation*, Prentice Hall: Upper Saddle River, NJ.
- Malhotra, N. K., Agarwal, J., and Peterson, M. F. (1996) 'Methodological Issues in Cross-Cultural marketing Research: A State-of-the-Art Review', *IMR International Marketing Review* 13(5)

- Marcoux, J.-S., Filiatrault, P., and Chéron, E. (1997) 'The Attitudes Underlying Preferences of Young Urban Educated Polish Consumers Toward Products Made in Western Countries', *International Consumer Marketing* 9(4): 5-29.
- Marín, C. E. and Miquel, S. (1997) 'Evaluación de la Fiabilidad y Validez de la CETSCALE en el ámbito Español: Perfil del Consumidor Etnocéntrico', *Revista Europea de Dirección y Economía de la Empresa* 6(2): 45-56.
- Mathur, A. (1998) 'Examining Trying as a Mediator and Control as a Moderator of Intention-Behavior Relationship', *Psychology & Marketing* 15(3): 241-259.
- Matsuno, K. and Mentzer, J. T. (2000) 'The Effects of Strategy Type on the Market Orientation-Performance Relationship', *Journal of Marketing* 64(4): 1-16.
- McDonald, W. (1994) 'Provider Perceptions of Focus Group Research Use: A Multicountry Perspective', *JAMS Journal of the Academy of Marketing Science* 22(3): 265-273.
- McKenna, F. P. (1993) 'It won't Happen to Me: Unrealistic optimism or Illusion of Control', *British Journal of Psychology* 84(1): 39-50.
- Mummendey, A., Klink, A., and Brown, R. (2001) 'Nationalism and Patriotism: National Identification and Out-group Rejection', *British Journal of Social Psychology* 40: 159-172.
- Naussbaum, M. C. (1994) 'Patriotism and Cosmopolitanism', *Boston Review* 19(5)
- Netemeyer, R. G., Durvasula, S., and Lichtenstein, D. (1991a) 'A Cross National Assessment of the Reliability and Validity of the CETSCALE', *Journal of Marketing Research* 28(August): 320-327.
- Netemeyer, R.G., Pullig, C., and Bearden, W.O. (2002b) 'Observations on Some Key Psychometric Properties of Paper-and-Pencil Measures' in A.G. Woodside and E.M. Moore (eds.) *Essays by Distinguished Marketing Scholars of the Society for Marketing Advances*, JAI Press: Boston, Mass., pp. 115-138.
- Nielsen, J. A. and Spence, M. T. (1997) 'A Test of the Stability of the CETSCALE: A Measure of Consumers' Ethnocentric Tendencies', *Journal of Marketing Theory and Practice* Fall: 68-76.
- Nunnally, J.C. and Bernstein, I.H. (1994) *Psychometric Theory*, McGraw-Hill: New York.

- Okechuku, C. and Onyemah, V. (1999) 'Nigerian Consumer Attitudes Toward Foreign and Domestic Products', *Journal of International Business Studies* 30(3): 611-622.
- Olsen, J. E., Granzin, K. L., and Biswas, A. (1993) 'Influencing Consumers' Selection of Domestic Versus Imported Products: Implications for Marketing Based on a Model of Helping Behavior', *Journal of the Academy of Marketing Science* 21(4): 307-321.
- Parameswaran, R. and Yaprak, A. (1987) 'A Cross-National Comparison of Consumer Research Measures', *Journal of International Business Studies* Spring: 35-49.
- Pedhazur, E.J. and Schmelkin, L.P. (1991) *Measurement, Design, and Analysis: An Integrated Approach*, Lawrence Erlbaum Associates, Publishers: Hillsdale, New Jersey.
- Piron, F. (2002) 'International Outshopping and Ethnocentrism', *European Journal of Marketing* 36(1/2): 189-210.
- Reynolds, N. L., Simintiras, A. C., and Diamantopoulos, A. (2002) 'Theoretical Justification of Sampling Choices in International Marketing Research: Key Issues and Guidelines for Researchers', *Journal of International Business Studies* doi:10.1057/palgrave.jibs.8400000
- Rook, D. W. and Fisher, R. J. (1995) 'Normative Influences on Impulsive Buying Behavior', *Journal of Consumer Research* 22(3): 305-313.
- Rosenberg, M. (1965) *Society and the Adolescent Self-image*, Princeton University Press: Princeton, N.J.
- Rosenberg, M., Schooler, C., Shoenbach, C., and Rosenberg, F. (1995) 'Global Self-Esteem and Specific Self-Esteem: Different Concepts, Different Outcomes', *American Sociological Review* 60(February): 141-156.
- Rosenstock, I. M. (1974) 'Historical Origins of the Health Belief Model', *Health Education Monographs* 2: 1-8.
- Schooler, C. (1996) 'Cultural and Social-structural Explanations of Cross-national Differences', *Annual Review of Sociology* 22: 323-349.
- Sekaran, U. (1983) 'Methodological and Theoretical Issues and Advancements in Cross-Cultural Research', *Journal of International Business Studies* 14(2): 61-73.

- Sharma, S., Durand, R. M., and Gur-Arie, O. (1981a) 'Identification and Analysis of Moderator Variables', *Journal of Marketing Research* 18(3): 291-300.
- Sharma, S., Shimp, T. A., and Shin, J. (1995b) 'Consumer Ethnocentrism: A Test of Antecedents and Moderators', *Journal of the Academy of Marketing Science* 23(1): 26-37.
- Shimp, T. A. (1984) 'Consumer Ethnocentrism: The Concept and a Preliminary Empirical Test', *Advances in Consumer Research* 11: 285-290.
- Shimp, T. A. and Sharma, S. (1987) 'Consumer Ethnocentrism: Construction and Validation of the CETSACALE', *JMR Journal of Marketing Research* 24: 280-289.
- Sin, L. Y. M., Cheung, G. W. H., and Lee, R. (1999) 'Methodology in Cross-Cultural Consumer Research: A Review and Critical Assessment', *Journal of International Consumer Marketing* 11(4): 75-96.
- Slater, S. F. and Narver, J. C. (1994) 'Does Competitive Environment Moderate the Market Orientation-Performance Relationship?', *Journal of Marketing* 58(1): 46-55.
- Slovic, P., Fischhoff, B., & Linchenstein, S. (1981) 'Facts and Fears: Societal Perception of Risk', *Advances in Consumer Research*, pp. 497-502.
- Smith, G. E., Gerrard, M., and Gibbons, F. X. (1997) 'Self-Esteem and the Relation Between Risk Behavior and Perceptions of Vulnerability to Unplanned Pregnancy in College Women', *Health Psychology* 16(2): 137-146.
- Sproull, N.L. (1988) *Handbook of Research Methods: A Guide for Practitioners and Students in the Social Sciences*, The Scarecrow Press, Inc.: Metuchen, NJ.
- Steenkamp, J.-B. E. M. (2001) 'The Role of National Culture in International Marketing Research', *International Marketing Research* 18(1): 30-44.
- Steenkamp, J.-B. E. M. and Baumgartner, H. (1998) 'Assessing Measurement Invariance in Cross-National Consumer Research', *JCR Journal of Consumer Research* 25(1): 78-90.
- Steenkamp, J.-B. E. M., Hofstede, F. t., and Wedel, M. (1999) 'A Cross-National Investigation into the Individual and national Cultural Antecedents of Consumer Innovativeness', *JM Journal of Marketing* 63(2): 55-69.

- Strathman, A., Gleicher, F., Boninger, D. S., and Edwards, C. S. (1994) 'The Consideration of Future Consequences: Weighing Immediate and Distant Outcome Behavior', *Journal of Personality and Social Psychology* 66(4): 742-752.
- Sumner, W.G. (1906) *Folkways: A Study of Sociological Importance of Usages, Manners, Customs, Mores, and Morals*, Ginn & Co.: Boston.
- Supphellen, M. and Rittenburg, T. L. (2001) 'Consumer Ethnocentrism when Foreign Products are Better', *Psychology & Marketing* 18(9): 907-927.
- Svensson, G. (2002) 'Vulnerability Scenarios in Marketing Channels', *Supply Chain Management: An International Journal* 7(5): 322-333.
- Taylor, J. W. (1974) 'The Role of Risk in Consumer Behavior', *Journal of Marketing* 38(April): 54-60.
- Taylor, S. E. and Brown, J. D. (1988) 'Illusion and Well-Being: A Social Psychological Perspective on Mental Health', *Psychological Bulletin* 103(2): 193-210.
- _____ (1994) 'Positive Illusions and Well-being Revisited: Separating Fact from Fiction.', *Psychological Bulletin* 116(1): 21-27.
- Tocqueville, A.d. (1956) *Democracy in America*, New American Library: New York.
- Urdan, T.C. (2001) *Statistics in Plain English*, Lawrence Erlbaum Associates, Inc.: Mahwah, N. J.
- Verlegh, P.W.J. (1999) 'Ingroups, Outgroups and Stereotyping: Consumer Behavior and Social Identity Theory', *Advances in Consumer Research*, pp. 162-164.
- Viroli, M. (1995) *For Love of Country: An Essay on Patriotism and Nationalism*, Clarendon Press: New York.
- Watson, J. J. and Wright, K. (2000) 'Consumer ethnocentrism and attitudes toward domestic and foreign products', *European Journal of Marketing* 34(9/10): 1149-1166.
- Weinstein, N. D. (1980) 'Unrealistic Optimism about future Life Events', *Journal of Personality and Social Psychology* 39(5): 806-820.

- _____ (1987) 'Unrealistic Optimism about Susceptibility to Health Problems: Conclusions from a Community-Wide Sample', *Journal of Behavioral Medicine* 10(5): 481-500.
- _____ (1989) 'Perceptions of Personal Susceptibility to Harm' in V.M. Mays, G.W. Albee, and S.F. Schneider (eds.) *Primary Prevention of AIDS: Psychological Approaches*, SAGE Publications: Newbury Park, CA
- Weinstein, N. D. and Klein, W. M. (1995) 'Resistance of Personal Risk Perceptions to Debiasing Interventions', *Health Psychology* 14(2): 132-140.
- Weinstein, N. D., Lyon, J. E., Rothman, A. J., and Cuite, C. L. (2000) 'Changes in Perceived Vulnerability following Natural Disaster', *Journal of Social and Clinical Psychology* 19(3): 372-395.
- White, P. D. and Cundiff, E. W. (1978) 'Assessing the Quality of Industrial Products', *Journal of Marketing* 42(1): 80-86.
- Witkowski, T. H. (1998) 'Consumer Ethnocentrism in two Emerging Markets: Determinants and Predictive Validity', *Advances in Consumer Research* 25: 258-263.
- Zadeck, S. (1971a) 'Identification of Moderator Variables by Discriminant Analysis in a Multipredictable Group Validation Model', *Journal of Applied Psychology* 55(4): 364-371.
- _____ (1971b) 'Problems with the Use of "Moderator" Variables', *Psychological Bulletin* 76: 295-310.

