

“Buy National” and Altruistic Market Segments

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ABSTRACT. Various constituencies concerned about national competitiveness and economic leadership launch and fund campaigns to promote the purchase of domestic products at home and abroad. Despite the widespread use of these marketing programs, little is known about what may cause these programs to be more successful with some market segments more than others. This paper reports research that examines demographic market segments that have greater levels of altruism as measured by consumer ethnocentrism, cognitive moral development, and prosocial behavior. In addition, the buyer behavior of those segments is examined in the context of their purchase of domestic compared to foreign products. Market segments are suggested that may be more likely to respond to buy-national programs and guidelines for policy makers and for the managers of global products are presented. doi:10.1300/J042v20n04_06 [Article copies available for a fee from The Haworth Document Delivery Service: 1-800-HAWORTH. E-mail address: <docdelivery@haworthpress.com> Website: <http://www.HaworthPress.com> © 2007 by The Haworth Press, Inc. All rights reserved.]

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INTRODUCTION

The choice a consumer makes between a foreign product and a domestic offering has major strategic and economic implications that are important to the firms and countries involved. As a result, various constituencies, including trade unions, corporations, and national governments launch and fund “buy-national” campaigns to promote the purchase of domestic products at home and abroad (Amine, 2005; Ettenson, Wagner, and Gaeth, 1988). Through advertising and public relations efforts, such campaigns seek to generate and exploit latent national bias and foster a consumer preference for domestic goods (Elliott and Cameron, 1994). Despite the widespread use of this type

of marketing program, little is known about the factors that may cause these programs to be more successful with some market segments more than others. An underlying motivating value is the impact of the purchase on other members of that person’s society (Wolfe, 1992). *Altruism*, a construct that is being given increased attention in the literature, provides a useful basis for understanding this process (Bendapudi, Singh, and Bendapudi, 1996; Price, Feick, and Guskey, 1995; Goolsby and Hunt, 1992; Guy and Patton, 1989).

Research on altruistic behavior in the context of product choice in the global marketplace represents an exciting application of this perspective (Hamin and Elliott, 2006; Olsen, Granzin, and Biswas, 1993). The framework

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used in this research examines the impact of consumer ethnocentrism, cognitive moral development, and prosocial behavior on consumer choice between a domestic versus a foreign automobile. A consumer's purchase choice of a domestic or a foreign automobile represents a critical economic issue for both firms and the countries that they operate in as evidenced by research interest in country-of-origin effects for automotive brands (Loeffler, 2002; Haubl, 1996), consumer evaluations of hybrid products (Chao, 1993) and the effects of country design and country of assembly on evaluative beliefs about products and attitudes towards buying them (Brodowsky, 1998; Jin and Chansarkar, 2006). Automobile manufacturers are increasingly aggressive in marketing their products outside of their home markets and a substantial portion of trade deficits for countries, such as the United States, is in automobiles and automobile parts (Smith, 1997).

Given the importance of reaching buyers that may be interested in buying products from their own country, research that identifies these buyers is necessary. The purpose of this paper is to identify those altruistic individuals that may be more likely to be receptive of a message from local marketers. In order to accomplish this, the relationship between demographic variables (age, education, and income) and levels of altruism (as measured by consumer ethnocentrism, cognitive moral development, and prosocial behavior) is identified. By determining demographic factors that are related to altruistic behavior in the choice of a domestic product, manufacturers and retailers considering promotions with patriotic themes can target specific consumer groups that prefer a product of domestic manufacture. Based on the results of this research, market segments are suggested that may be more likely to respond to buy-national programs. In the following sections of the paper the literature is reviewed, the research method is described, and the results are presented and discussed.

ALTRUISM AND PRODUCT PREFERENCE

Buy-national campaigns promote the purchase of products from the same country of ori-

gin as that in which the consumer resides. Labor unions, company management, and other groups use these campaigns to support those workers whose jobs are threatened. In the United States buy-national campaigns occurred during the American Revolution, during a period of economic nationalism in the 1930s, and in the 1970s and early 1980s (Frank, 1999). In these instances, the notion of fixing the economy by "buying American" was attractive to unemployed workers and those anxious about the impact of imported products on domestic employment. The research addressing buy-national campaigns reports mixed results of their performance (Granzin and Olsen, 1995; Wall and Heslop, 1986; Fenwick and Wright, 1999). This problem may be directly related to demographic factors. For example, in examining consumer attitudes towards products of foreign origin, the findings of Chao and Rajendran (1993) suggest that consumers' ethnocentric tendencies can be expected to vary according to consumer profiles based on demographic data. Such data includes an identification of the product purchased and the consumer's demographics—gender, age, education, and economic strength (Parmar, 2002) as they relate to values and behaviors (Staples, 2000). A key value that can be related to buy-national campaigns is the consumers' attitudes toward their fellow fellow citizens. One such attitude is altruistic behavior, or having the goal of increasing another's welfare (Batson, 1991). In the context of a "buy-national" program, altruistic behavior includes the notion that purchasing products manufactured with materials and labor from one's own country helps others by providing jobs. This linkage was clearly used in Wal-Mart's recent buy-national program (Drickhammer, 2003). It tied "buying-American" to jobs by listing the number of jobs that were either created or saved by sourcing its merchandise purchases from American firms. An interesting aspect of this process is that consumers may prefer a domestic product offering, however, it is not necessarily reflected in their actual purchase behavior (Kinra, 2006; Kwok and Uncles, 2006).

Although there are numerous elements that influence purchase decisions, altruism is considered to have an important influence (Simon, 1993). Altruistic behavior can be understood in

terms of an interaction between cultural, cognitive, and behavioral determinants (Bar-Tal, 1976, pp. 14-37). Based on this framework, we examine altruism in terms of three dimensions: 1) *ethnocentrism*—the universal tendency for people to favor their own group over others (Rushton, Russell, and Wells, 1984) applied to consumer behavior by Shimp and Sharma (1987); 2) *cognitive moral development*—the way in which individuals acquire, through time, an increasingly accurate understanding of their moral obligations (Rest, 1979); and 3) *prosocial behavior*—that behavior which is carried out to benefit another without anticipation of external rewards and performed for its own end and restitution (Bar-Tal, 1976, pp. 4, 14-37; Kohlberg, 1969; Rushton, 1989). Ethnocentrism represents a cultural basis for altruism. Cognitive moral development represents a cognitive basis, and prosocial behavior is a behavioral basis.

Consumer ethnocentrism is based on the universal tendency for people to favor their own group over others (Booth, 1979; Levine and Campbell, 1972; Sumner, 1906; Worchel and Cooper, 1979) and represents the beliefs held by consumers about the propriety of purchasing foreign products (Hamin and Elliot, 2006; Shimp and Sharma, 1987). Ethnocentric consumers may regard the purchase of imported products as being wrong as such purchases negatively impact the domestic economy, increase unemployment, or are unpatriotic. Non-ethnocentric consumers may evaluate foreign products on their own merits without regard for the origin of their manufacture. Consumer ethnocentrism provides the individual with a sense of identity and an understanding of what purchases are acceptable or unacceptable (Shimp and Sharma, 1987).

Social scientists have considered similarities in demographic, physical, and psychological characteristics to be an important factor in marriage, attraction, friendship, and group cohesion (Byrne, 1971). It has been reported that people are more likely to help members of their own race or country than they are to help members of other races or foreigners (Cunningham, 1981; Rushton, 1989). As applied to consumer purchase behavior, domestic products have historically provided the frame of reference for

the evaluation of foreign products (Shimp and Sharma, 1987). Though large numbers of consumers now are willing to consider foreign products as alternatives to domestic items, some consumers staunchly refuse to buy imported products and chastise fellow consumers for doing so. These consumers may claim buying foreign goods puts domestic workers out of work, hurts the economy, or is unpatriotic. However, they may moderate this position when domestic products are judged as being of lower quality or when they hold higher conspicuous consumption values (Cheng and Chen, 2004). Other consumers are equally vocal in defending their right to buy whatever products they wish, regardless of place of manufacture.

Cognitive moral development is defined as the way in which individuals acquire, through time, an increasingly accurate understanding of the nature of their moral obligations (Rest, 1979). Research has documented the process of moral development to warrant generalizing the progressive nature of moral development hypothesized by Kohlberg (1969) across many populations and cultures. For example, a recent study indicates the potential influence of culture, education, sex and gender in the cognitive moral development of business professionals and graduate business students in India and the U.S. (Kracher, Chatterjee, and Lundquist, 2002) (for reviews, see Blasi, 1980; Brabeck, 1984; Gibbs and Widaman, 1982; Krebs, 1978; and Snarey, 1985).

Prosocial behavior is defined as voluntary behavior that is carried out to benefit another without anticipation of external rewards and is performed under two circumstances: for its own end and as an act of restitution (Bar-Tal, 1976, pp. 4). Prosocial behavior can be directly traced to several theoretical sources: Gouldner's (1960) proposition regarding the prevalence of the universal norm of reciprocity; Leed's (1963) suggestion regarding the prescription of the norm of giving; Piaget's (1932) and Kohlberg's (1958, 1969) approach towards the development of moral judgment; and Aronfreed's (1968) conceptualization of conscience development. These theories explicitly discuss social conditions for prosocial behavior, or implicitly offer a basis for it.

Several demographic variables influence the occurrence of prosocial behavior (Bryan and Test, 1967; Latane and Dabbs, 1975; Piliavin, Rodin, and Piliavin, 1969). Age has been positively reported to influence prosocial behavior (Handlon and Gross, 1959; Midlarsky and Bryan, 1967; Urgurel-Semin, 1948). As individuals mature and experience physiological, psychological, and social changes their prosocial behavior increases (Krebs, 1970). The relationship between prosocial behavior and household income remains subject to question. Smith, Kehoe, and Cremer (1995) reported that household income played no role in the decision to make donations; however, it positively influenced the subsequent decision about donation size. The literature indicates that traits of generosity and consideration increase with education (Almond and Verba, 1963), although there is a greater interest in the literature on the relationship of prosocial behavior and intelligence. Unger (1964) reports that more intelligent subjects tend to react to experimental conditions with socially approved behavior.

RESEARCH OBJECTIVE AND METHOD

The objective of this research is to identify demographic segments that have altruistic behavior and that are likely to purchase domestic products. By identifying such segments, managers contemplating buy-national programs may have a better opportunity to target consumers that are more receptive to this type of promotion. In order to examine this issue, the first hypothesis is designed to identify the overall link between altruism and choice of a domestic product. The second set of hypotheses addresses the relationship between gender, product choice, and the dimensions of altruism. The third set of hypotheses addresses the relationship between age, product choice, and the dimensions of altruism. The fourth set of hypotheses addresses the relationship between education, product choice, and the dimensions of altruism. The fifth set of hypotheses addresses the relationship between household income, product choice, and the dimensions of altruism. The research framework is seen in Figure 1 and the specific hypotheses are:

H_{1,0}: Individuals with high levels of altruism are more likely to purchase a domestic product.

H_{2,0}: Choice of a foreign/domestic product varies by gender.

H_{2,1}: There is a significant difference in the level of consumer ethnocentrism based on gender.

H_{2,2}: There is a significant difference in the level of cognitive moral development based on gender.

H_{2,3}: There is a significant difference in the level of prosocial behavior based on gender.

H_{3,1}: Higher age is positively related to the choice of a domestic product

H_{3,2}: Individuals of higher age have greater levels of consumer ethnocentrism.

H_{3,3}: Individuals of higher age have greater levels of cognitive moral development.

H_{3,4}: Individuals of higher age have greater levels of prosocial behavior.

H_{4,1}: Higher education level is positively related to the choice of a domestic product.

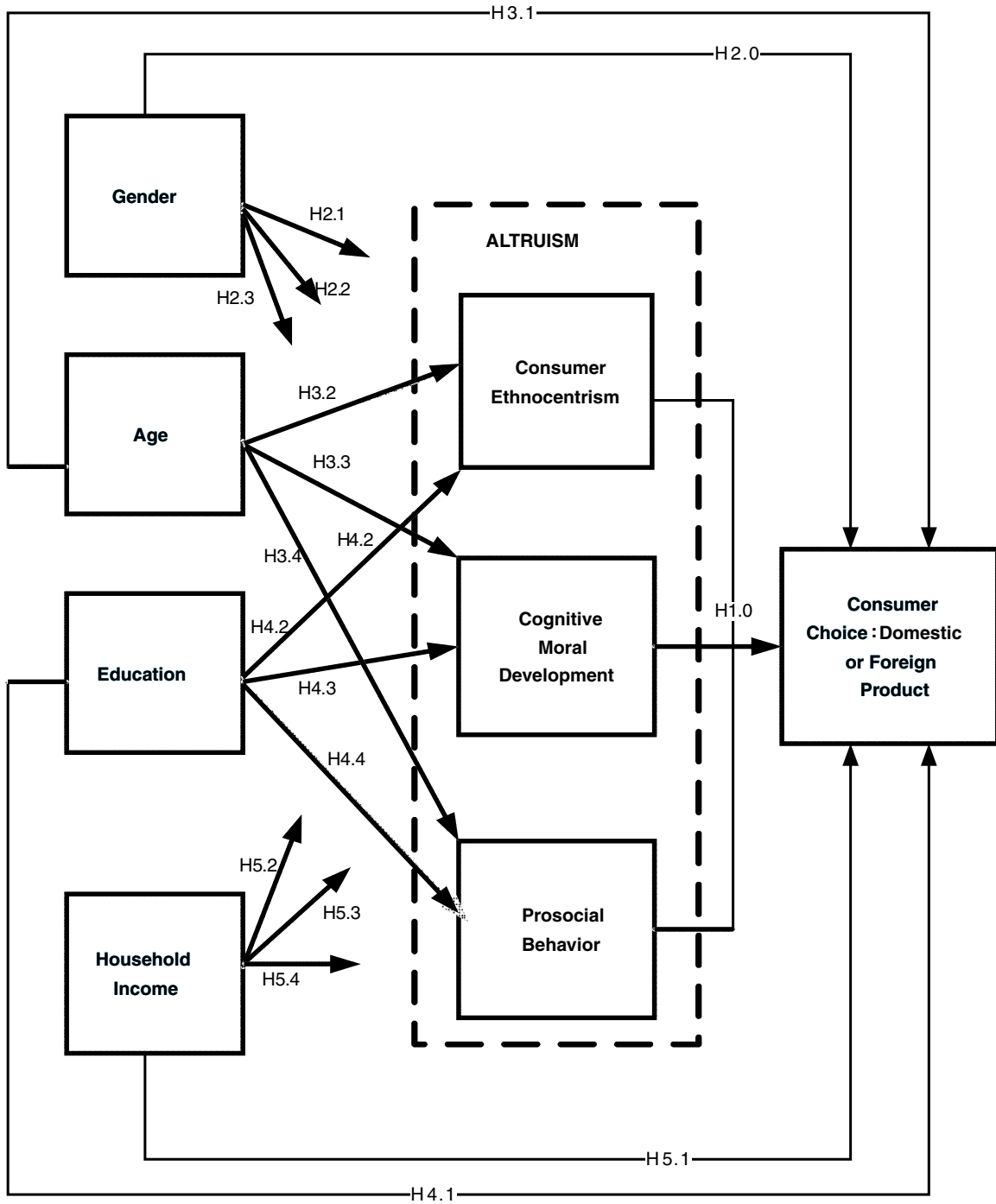
H_{4,2}: Individuals with higher education have greater levels of consumer ethnocentrism.

H_{4,3}: Individuals with higher education have greater levels of cognitive moral development.

H_{4,4}: Individuals with higher education have greater levels of prosocial behavior.

H_{5,1}: Higher household income is positively related to the choice of a domestic product.

FIGURE 1. A Model of Prosocial Behavior Applied to Product Choice



H_{5.2}: Individuals with higher household income have greater levels of consumer ethnocentrism.

H_{5.3}: Individuals with higher household income have greater levels of cognitive moral development.

H_{5.4}: Individuals with higher household income have greater levels of prosocial behavior.

The study population consisted of a multi-stage cluster sampling of households from a suburban metropolitan area of approximately one million households within the United States. Six street intersections were randomly chosen from standard municipal maps available from local political jurisdictions and a 40-address sampling frame was devised, based upon the 40 addresses nearest the intersection. Thus, 1,440 ($6 \times 6 \times 40$) addresses made up the sampling frame. From this frame, 18 addresses were randomly selected from each of the previously designated 36 intersections resulting in 648 addresses being selected. The study utilized a drop and collect technique to collect survey data (Brown, 1987).

Consumer ethnocentrism was measured using the CETSCALE (Shimp and Sharma, 1987). The scale contains 17 items relevant to the beliefs held by American consumers about the appropriateness or morality of purchasing foreign products. Rest's (1986) Defining Issues Test (DIT) was used to measure cognitive moral development. The DIT has been used in over 100 studies involving 5,000 subjects (Rest, 1976). Subjects were presented with six social problems and were asked to select a course of action and rate twelve issue statements on a five-point scale of importance determined to be the most important in each ethical judgment. The Self-Report Altruism Scale (SRAS), a 20-item test developed by Rushton, Chrisjohn, and Fekken (1981) was used to assess helping behavior. This scale lists 20 everyday helping behaviors (e.g., making donations to charity, giving directions to a stranger) and asks its respondents to rate the frequency with which one has engaged in these helping behaviors by specifying either never, once, more than once, often, or very often.

Respondent heads of household were instructed to choose between an American or Japanese automobile product. The definition of "foreign" for the purpose of this research was based on the location of the parent company. Automobile products were chosen as they represent a very important economic sector and historically account for a large portion of trade deficits between the United States and Japan (Baily, 1993). After being presented with the hypothetical problem that one of the cars they drive is no longer suitable and that they are about to purchase a new car, respondents were asked to choose one of the two outcomes in a self-administered questionnaire, and the choice outcomes (Kerlinger, 1986) were then coded as either 0 or 1.

RESULTS AND FINDINGS

Two hundred fifty two questionnaires were returned and 212 responses were usable for an effective response rate of 32.7%. The response rate was considered acceptable and is consistent with previous studies using the drop and return survey procedure (Brown, 1987). Of the 212 respondents, 98 (46.2%) were male and 114 (53.8%) were female. The average age of these individuals was 52. Seventy-four percent of the sample was married living in a household consisting of two adults. The level of education ranged from having a high school education or less to having a postgraduate degree with the average respondent having attended college ($M = 2.9$; Standard Deviation = 1.3). The average respondent's total household income was above average approaching \$50,000 per year. A comparison of the demographic profiles (age, education, and household income) of the respondents revealed no significant difference between the sample and the general population from which it was drawn.

Reliability of the scales used in this study was tested using coefficient alpha and the split-half method. The internal consistency reliability of the 17-item CETSCALE was .9534. The internal consistency reliability of the DIT's six social problems was .7886. The coefficient alpha of the 20-item Self-Report Altruism Scale (SRAS) was .8518. The coefficients of the scales had alphas greater than the 0.70

generally accepted threshold for published empirical research (Nunnally and Bernstein 1994). Validity of the scales used in this study was established with Pearson product moment correlation coefficients computed using factor analysis.

RESULTS BY HYPOTHESIS

The results are seen in Tables 1-8. Hypothesis 1.0, 3.1, 4.1, and 5.1 were analyzed using logistic regression to assess the impact of altruism on product choice. Hypothesis 2.0 was tested using chi-square. Hypotheses 2.1, 2.2, and 2.3 were tested using independent sample t-tests. Hypotheses 3.2, 3.3, 3.4, 4.2, 4.3, 4.4, 5.2, 5.3, and 5.4 were tested using one-way

analysis of variance (ANOVA) to distinguish between various demographic groups. Gabriel’s Test, a multiple comparison post hoc test was also used to distinguish among the means in the comparison of groups.

Hypothesis 1.0: Individuals with High Levels of Altruism are More Likely to Purchase a Domestic Product. The -2 log likelihood statistic indicated that the multiple logistic regression model fit the data (model $X^2 = 25.64$, $p = .0000$; Table 1), a moderately strong relationship between the predictor variables—consumer ethnocentrism, cognitive moral development and prosocial behavior and the likelihood of an individual purchasing a domestic product. The beta coefficient indicated a positive, statistically significant relationship between consumer ethnocentrism and the likelihood of an

TABLE 1. Hypothesis 1.0: Dimensions of Altruism and Product Choice

Dimension of Altruism	B	S. E.	WALD	DF	SIG	R	EXP (B)
Consumer Ethnocentrism (GETSCALE)	.0579	.0135	18.3206	1	.0000	.2561	1.0596
Cognitive Moral Development (Definitive Issues Test)	.0534	1.2098	.0019	1	.9648	.0000	1.0548
Prosocial Behavior (Self-Report Altruism Scale)	.0336	.0164	4.2046	1	.0403	.0941	1.0341
Constant	-3.4393	1.2866	7.1454	1	.0075		

TABLE 2. Hypothesis 2.0: Gender and Foreign/Domestic Product Choice

			Vehicle Make Choice		Total
			Foreign	Domestic	
Gender	Male	Observed Count	25	73	98
		Expected Count	26.8	71.2	98.0
	Female	Observed Count	33	81	114
		Expected Count	31.2	82.8	114.0
Total		Observed Count	58	154	212
		Expected Count	58.0	154.0	212.0
		Value	df	Asymp. Sig. (2-sided)	
Pearson Chi-Square		.313	1	.576	

TABLE 3. Gender and the Dimensions of Altruism Independent Sample Test

H	Dimension of Altruism	Mean		t	F	Sig.
		Male	Female			
2.1	Consumer Ethnocentrism	40.5918	45.5439	-2.401	.730	.314
2.2	Cognitive Moral Development	.34957	.36761	-.915	2.609	.108
2.3	Prosocial Behavior	61.1837	61.6316	-.313	3.983	.754

TABLE 4. Demographic Influences on Product Choice

H	Demographic Influence	B	S.E	Wald	Df	Sig
3.1	Age	.251	.083	9.238	1	.002
4.1	Education	-.241	.116	4.312	1	.038
5.1	Household Income	-.025	.061	.165	1	.684

TABLE 5. Age and the Dimensions of Altruism

H	Dimension of Altruism	SS	df	MS	F	Sig
3.2	Consumer Ethnocentrism	4634.448 43725.797	6 205	772.408 213.297	3.62	.002
3.3	Cognitive Moral Development	.527 3.790	6 205	.088 .018	4.75	.000
3.4	Prosocial Behavior	620.936 22020.857	6 205	103.489 107.419	.963	.451

TABLE 6. Household Income and the Dimensions of Altruism

H	Dimension of Altruism	SS	df	F	Sig
4.2	Consumer Ethnocentrism	6777.356 41582.889	4 207	8.434	.000
4.3	Cognitive Moral Development	.343 3.975	4 207	4.465	.002
4.4	Prosocial Behavior	1387.771 21254.021	4 207	3.379	.011

TABLE 7. Household Income and the Dimensions of Altruism

H	Dimension of Altruism	SS	df	F	Sig
5.2	Consumer Ethnocentrism	8403.059 39957.186	9202	4.72	.000
5.3	Cognitive Moral Development	.182 4.136	9202	.988	.451
5.4	Prosocial Behavior	1582.562 21059.230	9202	1.68	.094

individual's purchase of a domestic product. However, the beta coefficient for cognitive moral development indicated no statistically significant relationship between cognitive moral development and the likelihood of an individual's purchase of a domestic product. The coefficient for prosocial behavior reflected a significant, positive relationship between prosocial behavior and the likelihood of an individual's purchase of a domestic product. Based on two of three dimensions of altruism being

significantly related to the purchase of a domestic product, this hypothesis was supported.

Hypothesis 2.0: Choice of a foreign/domestic product varies by gender. The calculated chi-square statistic of 0.313 (Table 2) is less than the critical value of 3.841 for a chi-square distribution with one degree of freedom (at the 0.05 level). The test indicates that gender and consumer product choice are independent of each other (that is, gender does not influence product choice). The hypothesis is not sup-

TABLE 8. Summary of Findings

Hyp	Issue Investigated	RESULTS
1.0	High levels of altruism and the likelihood of purchasing a domestic product.	Two of three dimensions of altruism—Consumer Ethnocentrism and Prosocial Behavior are significantly related to the purchase of a domestic product.
2.0	Consumer choice for a foreign/domestic product and gender	Gender is not a factor in the choice of foreign/domestic product.
2.1	Significant difference in the level of consumer ethnocentrism based on gender	No significant difference based on gender.
2.2	Significant difference in the level of cognitive moral development based on gender	No significant difference based on gender.
2.3	Significant difference in the level of prosocial behavior based on gender	No significant difference based on gender.
3.1	Higher age is positively related to the choice of a domestic product	Older consumers prefer the choice of a domestic product.
3.2	Individuals of higher age and greater levels of consumer ethnocentrism	Mean differences in consumer ethnocentrism for respondents in the age groups 18 to 24, greater than 65 years and 55 to 64 are significantly higher than respondents in groups ages 25 to 34, 35 to 44 and 45 to 49 years, respectively, are significant at the 0.05 level.
3.3	Individuals of higher age and greater levels of cognitive moral development	Mean differences in cognitive moral development are higher for respondents in age groups 45 to 49, 35 to 44, 25 to 34 than those in age groups 50 to 54, 55 to 64, 65 and older, and 18 to 24.
3.4	Individuals of higher age and greater levels of prosocial behavior	No significant differences between the seven age groups.
4.1	Higher education level is positively related to the choice of a domestic product	Individuals with higher levels of education prefer foreign products.
4.2	Individuals with higher education have greater levels of consumer ethnocentrism	Mean differences for respondents in groups completing postgraduate study and postgraduate degrees are significantly higher than respondent groups attending college and completing a college degree; high school or less, attending college and college degree are significant.
4.3	Individuals with higher education and greater levels of cognitive moral development	Mean differences for respondents in groups completing postgraduate study without a degree and postgraduate degrees are significantly higher than respondent groups that completed high school or less, attended college and completing a college degree.
4.4	Individuals with higher education and greater levels of prosocial behavior	Mean differences in prosocial behavior for respondents in groups completing a postgraduate degree, attended college, graduated from college and completed postgraduate study without a degree are significantly higher than the respondent groups that completed high school or less, attended college and completing a college degree.
5.1	Higher household income is positively related to the choice of a domestic product.	Level of household income is not a factor in the choice of foreign products.
5.2	Individuals of higher household income and greater levels of consumer ethnocentrism	Mean differences in consumer ethnocentrism for respondents with household incomes in the groups less than \$15K, \$15K to \$24.9K, \$25 to \$34.9K, \$35 to \$49.9K are significantly higher than respondents in household income groups with no income, \$50K to \$74.9K, \$75K to \$99.9K, \$250K to \$499K, and \$100K to \$250K respectively.
5.3	Individuals with higher household income and greater levels of cognitive moral development	No significant differences between the nine income groups.
5.4	Individuals with higher household income and greater levels of prosocial behavior	No significant differences between the nine income groups.

ported indicating gender is not a factor in the choice of foreign/domestic product. *Hypothesis 2.1: Significant difference in the level of consumer ethnocentrism based on gender.* The computed t value of -2.401 (Table 3) is less than the critical value of 2.326 indicating that there is no significant difference between the mean scores of the two gender groups. The hypothesis is not supported indicating there is no significant difference in the level of consumer ethnocentrism based on gender; thus, gender is not a factor in targeting those who would be receptive to a buy-national campaign. *Hypothesis 2.2: Significant difference in the level of cognitive moral development based on gender.* The computed t value of -.915 (Table 3) is less than the critical value of 2.326 indicating that there is no significant difference between the mean scores of the two gender groups. The hypothesis is not supported indicating there is no significant difference in the level of cognitive moral development based on gender; thus, gender is not a factor in targeting those who would be receptive to a buy-national campaign. *Hypothesis 2.3: Significant difference in the level of prosocial behavior on gender.* The computed t value of -.313 is less than the critical value of 2.326 (Table 3) indicating that there is no significant difference between the mean scores of the two gender groups. The hypothesis is not supported indicating there is no significant difference in the level of cognitive moral development based on gender; thus, gender is not a factor in targeting those who would be receptive to a buy-national campaign.

Hypothesis 3.1: Higher age is positively related to the choice of a domestic product. Using logistic regression, the -2 log likelihood statistic (a chi-square statistic) indicated that the simple logistic regression model fit the data (model $X^2 = 9.742$, $p = .002$, Table 4). The data analysis model indicates a positive, statistically significant relationship between age and choice of a domestic product. The hypothesis is therefore supported indicating older consumers prefer the choice of a domestic product. *Hypothesis 3.2: Individuals of Higher Age have Greater Levels of Consumer Ethnocentrism.* The computed F value of 3.6213 (Table 5) in ANOVA is greater than the critical value of 2.89 indicating that there are significant differences at the 0.05 level between the mean scores

of the seven age groups. The hypothesis was supported. Post Hoc analysis using Gabriel's test indicated the mean differences in consumer ethnocentrism for respondents in the age groups 18 to 24, greater than 65 years and 55 to 64 are significantly higher than respondents in groups ages 25 to 34, 35 to 44 and 45 to 49 years, respectively, at the 0.05 level. *Hypothesis 3.3: Individuals of Higher Age Have Greater Levels of Cognitive Moral Development.* The computed F value of 4.755 (Table 5) in ANOVA is greater than the critical value of 2.14 indicating that there are significant differences at the 0.05 level between the mean scores of the seven groups. The hypothesis is therefore supported. Post Hoc analysis using Gabriel's test indicates mean differences in cognitive moral development are higher for respondents in age groups 45 to 49, 35 to 44, 25 to 34 than those in age groups 50 to 54, 55 to 64, 65 and older, and 18 to 24. *Hypothesis 3.4: Individuals of Higher Age Have Greater Levels of Prosocial Behavior.* The computed F value of 0.9634 (Table 5) in ANOVA is less than the critical value of 2.14 indicating that there are no significant differences at the 0.05 level between the seven age groups. The hypothesis is not supported.

Hypothesis 4.1: Higher education level is positively related to the choice of a domestic product. Using logistic regression, the -2 log likelihood statistic (a chi-square statistic) indicated that the simple logistic regression model fit the data (model $X^2 = 4.334$, $p = .0000$, Table 4). The data analysis model indicates a negative, statistically significant relationship between higher education level and choice of a domestic product. The hypothesis is therefore rejected indicating those with higher levels of education actually prefer foreign products. *Hypothesis 4.2: Individuals with Higher Education Have Greater Levels of Consumer Ethnocentrism.* The computed F value of 8.434 (Table 6) in ANOVA is greater than the critical value of 2.42 indicating that there are significant differences at the 0.05 level between the mean scores of the five education groups. The hypothesis was therefore supported. Post Hoc analysis using Gabriel's test indicated the mean differences for respondents in groups completing *postgraduate study* and *postgraduate degrees* are significantly higher than

respondent groups *attending college* and completing a *college degree*; *high school or less*, *attending college* and *college degree*, respectively. *Hypothesis 4.3: Individuals with Higher Education Have Greater Levels of Cognitive Moral Development.* The computed F value of 4.465 (Table 6) in ANOVA is greater than the critical value of 2.42 indicating that there are significant differences at the 0.05 level between the five education groups. As a result, the hypothesis is supported. A Post Hoc analysis was performed to identify what education groups were significantly different from other education groups. The mean differences for respondents in groups completing *postgraduate study without a degree* and *postgraduate degrees* are significantly higher than respondent groups that completed *high school or less*, *attended college* and completing a *college degree*, respectively. *Hypothesis 4.4: Individuals with Higher Education Have Greater Levels of Prosocial Behavior.* The computed F value of 3.379 (Table 6) in ANOVA is greater than the critical value of 2.42 indicating that there are significant differences between the mean scores of the five education groups. As a result, the hypothesis was supported. The results of the Post Hoc Gabriel test revealed mean differences in prosocial behavior for respondents in groups completing a *postgraduate degree*, *attended college*, *graduated from college* and completed *postgraduate study without a degree* are significantly higher than the respondent groups that completed *high school or less*, *attended college* and completing a *college degree*, respectively.

Hypothesis 5.1: Higher household income is positively related to the choice of a domestic product. Using logistic regression, the -2 log likelihood statistic indicated that the simple logistic regression model fit the data (model $X^2 = .164$, $p = .0000$). The data analysis model indicates a statistically insignificant relationship between household income and choice of a domestic product. The hypothesis is not supported indicating the level of household income is not a factor in the choice of foreign products. *Hypothesis 5.2: Individuals of Higher Household Income Have Greater Levels of Consumer Ethnocentrism.* The computed F value of 4.72 (Table 7) in ANOVA is greater than the critical value of 1.93 indicating that there are significant differences at the 0.05

level. The hypothesis is therefore supported. Post Hoc analysis using Gabriel's test indicated the mean differences in consumer ethnocentrism for respondents with household incomes in the groups *less than \$15K*, *\$15K to \$24.9K*, *\$25 to \$34.9K*, *\$35 to \$49.9K* are significantly higher than respondents in household income groups with *no income*, *\$50K to \$74.9K*, *\$75K to \$99.9K*, *\$250K to \$499K*, and *\$100K to \$250K* respectively. *Hypothesis 5.3: Individuals with Higher Household Income Have Greater Levels of Cognitive Moral Development.* The computed F value of 0.9883 (Table 7) in ANOVA is less than the critical value of 1.93 indicating that there are no significant differences at the 0.05 level between the nine income groups. Since the hypothesis proposed individuals with higher household income have greater levels of cognitive moral development, the hypothesis is not supported. *Hypothesis 5.4: Individuals with Higher Household Income Have Greater Levels of Prosocial Behavior.* The computed F value of 1.68 (Table 7) in ANOVA is less than the critical value of 1.93 indicating that there are no significant differences at the 0.05 level between the nine income groups. The hypothesis is therefore not supported.

DISCUSSION

The concept of altruism and the instruments that measure the interaction between its cultural, cognitive, and behavioral dimensions are useful tools for identifying individuals that may be interested in buying products from their own country and receptive to a message from local marketers. The results of this study are important to this effort and are summarized in Table 8. First, it has been demonstrated that individuals with a higher level of altruism, given the dimensions of prosocial behavior and consumer ethnocentrism, are more likely to purchase a domestic product. These dimensions in this context represent concerns directed toward the benefit of others in society and the domestic economy, and thus a general concern for the nation. This finding is obviously important in its own right, but it also provides a justification and rationale for identifying demographic segments based on their levels of altruism.

Age was found to be a differentiator that could be used for targeting buy-national programs. We found that older consumers preferred domestic products and had higher levels of two of the three dimensions of altruism. Older consumers had higher levels of consumer ethnocentrism and cognitive moral development, but not prosocial behavior. Education was found to be a possible differentiator that could be used for targeting buy-national programs. We found that more educated consumers preferred foreign products, but interestingly had higher levels of all of the three dimensions of altruism—consumer ethnocentrism, cognitive moral development, and prosocial behavior.

Household income was shown to not be a possible differentiator that could be used for targeting buy-national programs. Although we found that there was no difference in household income in terms of choice of a domestic or foreign product, we did identify some differences in levels of the consumer ethnocentrism dimension of altruism. Interestingly, we found that more middle-income groups had higher levels of consumer ethnocentrism and lower levels of cognitive moral development and prosocial behavior than did low income or higher income groups. This very well could reflect the fact that these income groups are more likely to represent workers that are at the crux of the impact of consumers buying domestic products. In addition, middle-income groups may have a heightened awareness of world economic events and the impact these events have on their earning ability and spending habits.

A major finding of the study was that as American consumer tendencies toward consumer ethnocentrism increase, the greater is the likelihood that these consumers will choose a product of domestic over foreign manufacture. This being the case, the question arises “How do marketers identify American consumer tendencies in this direction?” We suggest that market research efforts should include regular use the measurement instruments employed in this study, namely Shimp and Sharma’s CETSCALE, Rest’s Defining Issues Test (DIT), and the Self-Report Altruism Scale (SRAS). The strength of any consumer altruistic data trends in periodic tracking studies should narrow the focus on market segments

and consumer groups to determine whether the use of buy-national themes would be prudent in future promotional campaigns. Armed with this information, marketing efforts can use “addressable” media such as mail and e-mail could be used to target buy-national appeals to demographically based segments or zip code areas that indicate high levels of altruism.

For the purpose of this research, the differentiation between domestic and foreign was based on the location of the parent company. Hence, a Toyota model, while manufactured in the United States, would be considered a foreign product, whereas a Ford produced with parts made throughout the world, would be considered a domestic product. A Toyota buyer may in reality be helping Toyota’s American workers as much, or more, as a Ford buyer would be helping their American workers. Nonetheless, there may still be an overall perception that the product’s country of origin is indicative of what country receives the primary benefit of that purchase. In addition, there are other dimensions of a foreign or domestic brand image that may impact or outweigh the consumer’s choice besides altruistic influences. For example, Japanese products in general may be seen as superior in quality to the point that it outweighs any altruistic influence on the choice of a domestic product. Our research identifies the relationship between altruism and product choice, but it is far from being the sole reason behind that choice.

There are several directions for future research that should be noted. First, additional research needs to be conducted applying the model of prosocial behavior used by this study in other contexts and cultures. Applying the model in the context of another industry can determine whether the findings of the present study are product specific or generalizable across products. An application of this study’s model to the purchase choice of industrial products should also prove to be enlightening. Replication of this research in other national markets would document if the results found for consumers within the United States would be similar to those for other cultures. The impact of altruism on purchase behavior may be reduced in an increasingly globalized market (Pharr 2005). Since the study was conducted in the Pacific Southwest, replications in other

geographic areas within the U.S., where the threat of foreign competition has been particularly acute might also produce different results. Such location could be Michigan, where the decline in American manufacturer's share of the domestic automobile market is likely to exhibit the strongest ethnocentric sentiments. Other possible locations would include centers of apparel and textile products industry employment such as those in Alabama, Georgia, and North Carolina.

A second important task for future research would be to address substantive and theoretical issues arising from limitations of the present study. Future research could account for the potential existence of other variables and correlations. A model of prosocial behavior applied to consumer choice with other additions may be more complete and more useful in a descriptive and predictive sense. Other areas of possible research would be to measure altruistic behaviors subject to events (Russell and Russell, 2006). Altruistic purchase behavior could also be examined as it is affected by the level of involvement with the item purchased (Lin and Chen, 2006).

SUMMARY AND CONCLUSIONS

This study contributes to the prosocial behavior, marketing, consumer decision-making and product choice literature by specifically addressing the information needs of American and foreign marketing executives in the consumer goods industry. It does so by examining buying and demographic characteristics of consumers in light of the notion of altruism. The study is unique in that it applies the concept of altruism to consumer behavior, an application that has been largely overlooked in the international marketing literature. The study was based on a model of prosocial behavior. The model was developed to identify statistically significant correlations between consumer ethnocentrism, cognitive moral development, and/or prosocial behavior, as independent variables, and the purchase choice American consumers make between products of U.S. and foreign manufacture. A fundamental contribution of this study was the attempt to test empirically the usefulness of the prosocial behavior

model. To the authors' knowledge, the present study is the only study to incorporate and test the constructs addressed. At a minimum, this study advances understanding of the relationship of prosocial behavior, consumer ethnocentrism, and cognitive moral development to consumer product choice.

The present study used a research framework for understanding altruistic influences on consumer choice in the context of a consumer's decision to purchase of a domestic or foreign product. It has extended the work on altruistic behavior to an international product choice context. The results of this study suggest several important marketing implications for American as well as foreign marketing executives, interest groups, and firms in the consumer goods industry. The present study can contribute to the understanding of how marketers have enjoyed mixed results using "Buy-national" and "Made in America" marketing campaign strategies. An understanding of the findings identified by this study may enable those in the market segments most affected by international competition to restructure their buy-national marketing campaign strategy to focus on altruistic market segments.

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