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Consumer Ethnocentrism: Construction and Validation of the CETSCALE

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The concept of consumer ethnocentrism is introduced and a corresponding measure, the CETSCALE, is formulated and validated. Four separate studies provide support for the CETSCALE's reliability and convergent and discriminant validity. A series of nomological validity tests show consumer ethnocentrism to be moderately predictive of theoretically related constructs.

## Consumer Ethnocentrism: Construction and Validation of the CETSCALE

American-made products historically provided the frame of reference whereby American consumers evaluated imported products, which often were considered inferior and eschewed. Though large numbers of consumers now are willing to consider foreign-made goods as alternatives to American-made items, some consumers staunchly refuse to buy imported products and chastise fellow consumers for doing so, claiming that buying foreign goods puts Americans out of work, hurts the economy, or is unpatriotic. Other consumers are equally vociferous in defending their right to buy whatever products they wish, regardless of place of manufacture.

A study was designed to develop a psychometrically rigorous scale for measuring a concept we term "consumer ethnocentrism." Though the general applicability of ethnocentrism to the study of consumer behavior has been recognized (e.g., Berkman and Gilson 1978; Markin 1974), no known work has reformulated the concept specifically to suit the study of marketing and consumer behavior.

### THE CONSUMER ETHNOCENTRISM CONCEPT

The term "consumer ethnocentrism" is adapted from the general concept of ethnocentrism introduced more than 80 years ago by Sumner (1906). Though originally a purely sociological concept to distinguish between in-

groups (those groups with which an individual identifies) and outgroups (those regarded as antithetical to the ingroup), ethnocentrism has become a psychosocial construct with relevance to individual-level personality systems as well as to the more general cultural- and social-analytic frameworks (Levine and Campbell 1972). In general, the concept of ethnocentrism represents the universal proclivity for people to view their own group as the center of the universe, to interpret other 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 (Booth 1979; Worchel and Cooper 1979). The symbols and values of one's own ethnic or national group become objects of pride and attachment, whereas symbols of other groups may become objects of contempt (Levine and Campbell 1972).

We use the term "consumer ethnocentrism" to represent the beliefs held by American consumers about the appropriateness, indeed morality, of purchasing foreign-made products. From the perspective of ethnocentric consumers, purchasing imported products is wrong because, in their minds, it hurts the domestic economy, causes loss of jobs, and is plainly unpatriotic; products from other countries (i.e., outgroups) are objects of contempt to highly ethnocentric consumers. To nonethnocentric consumers, however, foreign products are objects to be evaluated on their own merits without consideration for where they are made (or perhaps to be evaluated more favorably *because* they are manufactured outside the United States). In functional terms, consumer ethnocentrism gives the individual a sense of identity, feelings of belongingness, and, most important for our purposes, an understanding of what purchase behavior is acceptable or unacceptable to the ingroup.

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### SCALE DEVELOPMENT

We have developed an instrument, termed the CETSCALE, to measure consumers' ethnocentric tendencies related to purchasing foreign- versus American-made products. We characterize the scale as a measure of "tendency" rather than "attitude," because the latter term suggests a greater degree of object specificity than the CETSCALE is intended to capture. "Attitude" is used most appropriately in reference to the consumer's feelings toward a specific object, such as a particular automobile model. "Tendency" captures the more general notion of a disposition to act in some consistent fashion toward foreign products *in toto*.

Construction of a unique scale is necessary because the classic measure of ethnocentrism, the California ethnocentrism scale (Adorno et al. 1950), is not directly relevant to the study of consumer behavior. It was not developed for that purpose and contains items inappropriate for the contemporary American situation (e.g., "European refugees may be in need, but it would be a big mistake to lower our immigration quotas and allow them to flood the country"). More recent ethnocentrism scales are available (e.g., Chang and Ritter 1976; Warr, Faust, and Harrison 1967), but they also have little relevance to the study of consumer behavior and marketing phenomena.

#### Domain Specification and Item Generation

A preliminary study provided insight into consumer thoughts about foreign-made products. More than 800 consumers expressed their opinions in response to the request to "describe your views of whether it is right and appropriate for American consumers to purchase products that are manufactured in foreign countries." Content analysis of the responses, along with researcher intuition and insights from pertinent literature, led to the specification of seven facets of consumers' orientations toward foreign products: (1) consumer ethnocentric tendencies, (2) price-value perceptions, (3) self-interest concerns, (4) reciprocity norms, and (5) rationalization-of-choice, (6) restrictions-mentality, and (7) freedom-of-choice views.<sup>1</sup>

Multiple items were generated to scale all seven dimensions. The preliminary study was the primary source of items. Editing of redundant statements reduced the initial pool from 225 to 180 items, all of which have the desirable property of being worded in the common consumer's vernacular rather than in formal academic language.

<sup>1</sup>Our original intent was to scale the general construct of consumer orientations toward foreign products, which was to include consumer ethnocentrism as just one of seven dimensions. The six nonethnocentric dimensions failed to satisfy psychometric requirements, however, and ultimately were deleted. In the following discussion these eliminated dimensions are mentioned for accuracy in describing the full scale development process leading to the CETSCALE.

#### Scale Purification

*Judgmental panel screening.* Individual members of a six-person judgmental panel (five holding Ph.D.s and one advanced doctoral student) assigned each of the 180 items to one of the seven conceptual dimensions. An *a priori* decision rule specified retaining an item only if at least five of six judges chose the same category. One hundred twenty-five items satisfied the rule; 25 of those were eliminated subsequently because they were redundant with other items.

*First purification study.* A mail questionnaire consisting of 117 Likert-type statements was administered to a sample of 850 households. In addition to the 100 statements that satisfied the initial screening and editing, 17 items from Adorno et al.'s (1950) patriotism (P) and politicoeconomic conservatism (PEC) subscales of the classic F (for fascism) scale were included for validation (details follow in the construct validation section).<sup>2</sup> Items were ordered randomly as 7-point Likert-type statements. Four hundred seven usable questionnaires were returned.

The 100 items were subjected to common factor analysis. Because the objective at this early juncture was to verify the postulated dimensions and to reduce the many items to a more tractable number, we used a moderately stringent decision rule and deleted all items loading  $< .5$  on any factor. Two dimensions and 57 items were deleted. Twenty-five of the remaining 43 items loaded on the consumer ethnocentrism dimension; all five of Adorno et al.'s P-subscale items satisfied the .5 decision rule and six of the PEC-subscale items satisfied the rule. Thus, 54 items were retained for the next round of scale purification. The 43 non-Adorno items were of primary concern.

*Second purification study.* Fifty-four items forming a new questionnaire were ordered randomly as 7-point Likert-type statements. Lists were purchased from a national mailing list company and 1000 questionnaires were mailed to households in each of three purposively selected metropolitan areas: Detroit, Denver, and Los Angeles. Approximately 950 questionnaires also were mailed to an available list of households in the two Carolinas. The response rates from the three metropolitan areas were virtually equal at 32.2, 32.3, and 31.5% usable questionnaires returned from Detroit, Denver, and Los Angeles, respectively. The response rate for the Carolinas was higher, nearly 60%, probably because respondents in this sample had served as panel members before and had been compensated for periodically completing questionnaires.

The 43 non-Adorno items were subjected to a confir-

<sup>2</sup>Adorno et al.'s (1950) patriotism (P) and politicoeconomic conservatism (PEC) subscales actually contain 10 and 14 items, respectively. However, because many of these items are outdated, only five of the P-subscale items and 12 of the PEC-subscale items were used. Slight wording changes were made to modernize the statements.

matory factor analysis designed to (1) substantiate the dimensionality of the 5-factor structure obtained from the first purification study and (2) eliminate additional unreliable items. An administrative decision rule specified that items loading less than .707 (the square root of .5) on a given factor be regarded as unreliable and therefore eliminable (cf. Fornell and Larcker 1981). The analysis (with data pooled across all four geographic areas) rejected one of the five conceptual dimensions (along with the three items postulated to load on it) and also found unreliable 22 of the items postulated to load on the four remaining conceptual dimensions.

The scale at this stage of development consisted of four conceptual dimensions and 18 items, 12 items loading on the consumer ethnocentrism dimension and two items on each of three remaining conceptual dimensions. Two features of this "final" scale were disturbing: two thirds of the items represented only one of four dimensions, and correlations between the complete 18-item scale and theoretically related variables (discussed subsequently in the construct validity section) were virtually identical to the correlations between these same variables and the 12-item consumer ethnocentrism subscale. We therefore decided to eliminate the three nonethnocentrism dimensions and to focus exclusively on refining the measure of consumer ethnocentrism, the CETSCALE.

*CETSCALE refinement.* Of the 25 items remaining in the consumer ethnocentrism dimension after the first purification study, 13 were found to be unreliable when analyzed by a confirmatory factor model that simultaneously tested all four conceptual dimensions and all 43 items. However, because only one conceptual dimension was retained, it was appropriate to test a confirmatory model containing all 25 of the items that passed the initial purification test.

An aggregate test was performed by pooling data from the four geographic areas into one overall sample; disaggregate tests also were run on data from each of the four areas. Results across all five tests consistently showed that 17 items satisfied the .5 reliability criterion. These 17 items represent the final CETSCALE. The items and their reliability values are reported in Table 1.

With reliable items identified, a final confirmatory analysis tested factor-structure equality across the four geographic areas by comparing a model having all parameters for all geographic areas set equal (i.e., a constrained solution) with a model allowing all parameters to vary freely (unconstrained solution). The unconstrained solution yielded a marginally better fit ( $p < .1$ ), but the near equivalency of goodness-of-fit indices for the two solutions indicates that the four geographic areas are essentially comparable in their response to the CETSCALE.

#### RELIABILITY ASSESSMENT AND CONSTRUCT VALIDATION

Four separate studies were performed to assess the reliability and construct validity of the 17-item CET-

Table 1  
17-ITEM CETSCALE<sup>a</sup>

Item	Reliability <sup>b</sup>
1. American people should always buy American-made products instead of imports.	.65
2. Only those products that are unavailable in the U.S. should be imported.	.63
3. Buy American-made products. Keep America working.	.51
4. American products, first, last, and foremost.	.65
5. Purchasing foreign-made products is un-American.	.64
6. It is not right to purchase foreign products, because it puts Americans out of jobs.	.72
7. A real American should always buy American-made products.	.70
8. We should purchase products manufactured in America instead of letting other countries get rich off us.	.67
9. It is always best to purchase American products.	.59
10. There should be very little trading or purchasing of goods from other countries unless out of necessity.	.53
11. Americans should not buy foreign products, because this hurts American business and causes unemployment.	.67
12. Curbs should be put on all imports.	.52
13. It may cost me in the long-run but I prefer to support American products.	.55
14. Foreigners should not be allowed to put their products on our markets.	.52
15. Foreign products should be taxed heavily to reduce their entry into the U.S.	.58
16. We should buy from foreign countries only those products that we cannot obtain within our own country.	.60
17. American consumers who purchase products made in other countries are responsible for putting their fellow Americans out of work.	.65

<sup>a</sup>Response format is 7-point Likert-type scale (strongly agree = 7, strongly disagree = 1). Range of scores is from 17 to 119.

<sup>b</sup>Calculated from confirmatory factor analysis of data from four-areas study.

SCALE. For ease of reference, the studies are termed the "four-areas study," the "Carolinas study," the "national consumer good study," and the "crafted-with-pride study." Each study's sample characteristics are reported in Table 2.

*Four-areas study.* This study provided the sample base from which the final 17-item CETSCALE was derived. Measures of attitudes toward foreign-made products, purchase intentions, and ownership of imported automobiles were taken at the same time consumer ethnocentrism was measured. Included were samples of 322, 323, and 315 respondents from the Detroit, Denver, and Los Angeles metropolitan areas, respectively, and 575 respondents from the Carolinas. Mean scores and standard deviations on the CETSCALE for the four geographic areas are Detroit M = 68.58, SD = 25.96; Carolinas M = 61.28, SD = 24.41; Denver M = 57.84, SD = 26.10; and Los Angeles M = 56.62, SD = 26.37.

**Table 2**  
**SAMPLE CHARACTERISTICS FOR FOUR STUDIES**

	<i>Four-areas study</i>	<i>Carolinas study</i>	<i>National consumer good study</i>	<i>Crafted-with-pride study</i>
<i>Sample size</i>	1535	417	2000+	145
<i>Sex (%)</i>				
Male	38.6	54.5	30.0	55.9
Female	61.4	45.5	70.0	44.1
<i>Age (%)</i>				
Under 25	6.3	1.2	16.7	NA <sup>a</sup>
25–34	22.9	2.6	24.7	NA
35–44	22.8	18.0	26.2 <sup>b</sup>	NA
45–54	17.1	26.0	32.4 <sup>c</sup>	NA
55–64	18.2	29.3		NA
Over 64	12.6	22.8		NA
<i>Income (%)</i>				
Under \$15,000	16.6	12.5	21.8 <sup>d</sup>	NA
\$15,001–30,000	36.3	32.5	25.4	NA
\$30,001–40,000	20.5	23.5	21.3	NA
Over \$40,000	26.7	31.5	31.5	NA

<sup>a</sup>Specific age delineations are irrelevant for this student sample, though the means and median ages are 21.5 and 21.0, respectively.

<sup>b</sup>This figure actually represents the percentage of respondents whose age is 35–49.

<sup>c</sup>This figure actually represents the percentage of respondents age 50 and older.

<sup>d</sup>This figure and those below it actually represent percentages for the following income categories: under \$20,000; \$20,000–29,999; \$30,000–39,999; and over \$40,000.

*Carolinas study.* The 417 respondents in this study are a subsample of the Carolinas group in the four-areas study. The distinguishing feature, however, is that *two full years prior* to completing the 17-item CETSCALE this subsample had responded to a detailed questionnaire measuring their foreign automobile ownership, purchase intentions, attitudes, beliefs, etc. We therefore were able to construct-validate the CETSCALE against data that, because of the long time separation between the two sets of measurements, are essentially free of artificial shared variance. On the 17-item CETSCALE the Carolinas subsample had a mean score of 61.73 and standard deviation of 24.24.

*National consumer good study.* This study, performed by a national marketing research agency, measured consumer opinions toward a category of consumer goods that has become increasingly vulnerable to foreign competition.<sup>3</sup> A national quota sample (by age and sex) of major areas of dominant influence (ADIs) participated in two phases of data collection. An initial sample of more than 3000 consumers responded to a telephone survey asking their opinions about domestic and imported items in the product category. Several weeks later these same households received a followup mail questionnaire

that included psychographic statements, demographic questions, and a reduced, 10-item version of the CETSCALE.<sup>4</sup> A total of more than 2000 respondents (over 60% usable response rate) completed the mail questionnaire. On the basis of a 5-point Likert scale (a 7-point scale was used in the other studies), this sample's mean is 29.28 with a standard deviation of 11.58 on the 10-item CETSCALE.

*Crafted-with-pride study.* College students ( $n = 145$ ) participated in a two-phase study that assessed their reactions to commercials from the ongoing "Crafted with Pride in U.S.A." advertising campaign. This campaign—jointly sponsored by the American Fiber, Textile, and Apparel Coalition and the American Textile Manufacturers Institution—was designed to make consumers more aware of the country of origin for apparel products and to enhance long-term preference for American-made garments. Our study, which was entirely independent of the industry group's research and proprietary interests, examined student responses to the crafted-with-pride campaign simply because it provided a relevant target against which to validate the CETSCALE.

In a first data collection phase, a questionnaire administered during classes measured consumer ethnocentrism (17-item CETSCALE) and, to examine discriminant validity, three intuitively related constructs: dogmatism, patriotism, and politicoeconomic conservatism. Individuals scoring high on the CETSCALE were expected to be more dogmatic, more patriotic, and more conservative. Five weeks later the same students viewed three 30-second crafted-with-pride commercials that portrayed celebrities (e.g., Bob Hope, O. J. Simpson) espousing their personal preferences for American-made apparel. Students then completed a questionnaire that measured their consumer ethnocentrism for a second time and also their attitudes and purchase intentions toward domestic and imported apparel. The students' mean scores on the CETSCALE and standard deviation for the first and second administrations are  $M(1) = 51.92$ ,  $SD(1) = 16.37$ ;  $M(2) = 53.39$ ,  $SD(2) = 16.52$ .

#### *Reliability Assessment*

The CETSCALE's internal consistency reliability is very high. Coefficient alpha for the four studies ranges from .94 to .96. Test-retest reliability could be assessed only in the crafted-with-pride study, in which the CETSCALE was administered on two occasions separated by a 5-week period. The correlation between these two administrations is  $r = .77$  ( $n = 138$ ;  $p < .001$ ). Both sets of results indicate that the CETSCALE is a reliable index of consumers' ethnocentric tendencies.

<sup>3</sup>The research agency insisted we conceal the identity of the product category and not disclose the exact sample size.

<sup>4</sup>The 10 items are numbers 2, 4, 5, 6, 7, 8, 11, 13, 16, and 17 in Table 1. Personnel at the marketing research agency chose these items purposively and were unwilling to include all 17 items because of questionnaire space limitations.

### Convergent and Discriminant Validation

Only in the Carolinas study could we assess convergent validity in the true sense of correlating maximally dissimilar measures. The 17-item CETSCALE was correlated with an open-ended measure taken two years prior to the CETSCALE administration ("Please describe your views of whether it is right and appropriate for American consumers to purchase products that are manufactured in foreign countries"). Two coders were in high agreement (93% concurrence) in classifying responses to the open-ended question as reflecting either "ethnocentric" or "nonethnocentric" sentiments. The correlation between the two measures ( $r = .54, n = 388, p < .001$ ) supports the CETSCALE's convergent validity, especially in view of the fact that there is no shared methods variance between these two time-separated measures.

Discriminant validity evidence is available in all studies except the national consumer good study. The studies incorporated measures of three constructs—patriotism, politicoeconomic conservatism, and dogmatism—that are related intuitively to consumer ethnocentrism. Correlations between consumer ethnocentrism and the related constructs are reported in Table 3.

All correlations between the CETSCALE and its related constructs are high and statistically significant. These correlations do not, however, undermine the CETSCALE's discriminant validity. Consumer ethnocentrism *should* share a moderately high amount of variance with these related constructs, partly because of common methods covariation (all constructs were measured at the same time with the same 7-point Likert-type scales) and also because of true covariation between related con-

structs. We believe that these correlations, though moderately high, do not compromise the CETSCALE's discriminant validity.<sup>5</sup>

### Nomological Validation

Extensive data have been amassed to examine the effects of consumer ethnocentrism on consumers' foreign-product-related beliefs, attitudes, intentions, and purchase behaviors. Two general predictions frame the subsequent presentation.

- H<sub>1</sub>: Scores on the CETSCALE should be strongly negatively correlated with consumers' beliefs, attitudes, and purchase intentions toward foreign-made products.
- H<sub>2</sub>: Scores on the CETSCALE should be negatively correlated with consumers' foreign-product behavior; however, these correlations should not be as strong as the correlations with behavioral antecedents, because the actual choice between American- and foreign-made products is determined by a variety of factors other than consumer ethnocentric tendencies *per se* (e.g., product availability, price differentials).

*Four-areas study.* The same questionnaire that measured respondents' ethnocentric tendencies also measured their attitudes toward foreign-made products, make of automobile owned (whether foreign or domestic), and make of automobile (foreign or domestic) that would be chosen if the respondent purchased a new car within the next year or so. The automobile was selected as the focal product because its material and media prominence make it the one consumption object of perhaps greatest relevance to the issue of attitudes toward origin of manufacture and the impact of consumer ethnocentrism on those attitudes.

In Table 4 are correlations between the CETSCALE and the various criterion variables. These results support the hypotheses, showing that (1) general attitudes toward foreign-made products are strongly negatively correlated with ethnocentric tendencies and (2) the stronger one's consumer ethnocentrism, the more likely one is to own a domestic-made automobile and/or to intend to purchase a domestic-made automobile.

*Carolinas study.* Of the four studies conducted, this one provides the most complete and rigorous nomological validity evidence. Respondents' ethnocentrism scores were used to *retrodict* a variety of measures adapted from Warshaw (1980), Fishbein and Ajzen (1975), and Ajzen and Fishbein (1980) that had been taken *two years before*

Table 3  
DISCRIMINANT VALIDITY EVIDENCE<sup>a</sup>

	Patriotism <sup>b</sup>		Politico-economic conservatism <sup>c</sup>		Dogmatism <sup>d</sup>	
	r	n	r	n	r	n
Four-areas study						
Detroit	.65	293	.59	295	NA	
Denver	.66	297	.53	296	NA	
Los Angeles	.66	286	.44	288	NA	
Carolinas	.57	536	.52	535	NA	
Carolinas study	.55	390	.51	390	NA	
Crafted-with-pride study	.39	137	.40	138	.40	134

<sup>a</sup>Pearson correlations between the CETSCALE and three intuitively related constructs. All correlations are significant at  $\alpha = .01$ .

<sup>b</sup>Patriotism was measured by a 5-item purified version of Adorno et al.'s (1950) patriotism scale. Coefficient alpha for this scale ranges from .58 to .69 across the various geographic locales and different studies.

<sup>c</sup>Politicoeconomic conservatism was measured by a 6-item purified version of Adorno et al.'s (1950) politicoeconomic subscale. Coefficient alpha for this scale ranges from .64 to .80 across the various geographic locales and different studies.

<sup>d</sup>Dogmatism was measured by a 20-item scale (Robinson and Shaver 1973, p. 435-36). Its coefficient alpha is .74.

<sup>5</sup>Fornell and Larcker (1981, p. 46) propose that discriminant validity is evidenced when the average variance extracted by each of two constructs is greater than their shared variance. This test applied to our data consistently supports the consumer ethnocentrism concept's discriminant validity. For example, for just the four-areas data, the average variances extracted by the CETSCALE and Adorno et al.'s (1950) politicoeconomic conservatism measure are 71% and 62%, respectively, whereas the shared variance between the two constructs is 35%. Similar results obtain for the remaining tests.

**Table 4**  
NOMOLOGICAL VALIDITY EVIDENCE FROM  
FOUR-AREAS STUDY<sup>a</sup>

	Attitudes toward foreign-made products <sup>b</sup>		Automobile ownership <sup>c</sup>		Purchase intents <sup>d</sup>	
	r	n	r	n	r	n
Detroit	-.65	292	.22	280	.20	278
Denver	-.67	297	.45	290	.44	276
Los Angeles	-.62	290	.41	282	.50	267
Carolinas	-.64	531	.31	533	.40	514

<sup>a</sup>Pearson correlations between the CETSCALE and three theoretically related constructs. All correlations are significant at  $\alpha < .01$ .

<sup>b</sup>Measured with single-item 11-point scale (0 = very unfavorable feelings toward personally buying and using foreign-made products, 11 = very favorable feelings).

<sup>c</sup>Response coded 1 for household ownership of American-made vehicle(s) only and 0 for ownership of one or more foreign-made vehicles.

<sup>d</sup>Measured with question: "If you were to purchase a new automobile within the next year or so, what makes/models would you seriously consider purchasing?" Listing an American-made automobile as the first choice was coded 1 and listing a foreign-made make first was coded 0.

respondents completed the CETSCALE. Results are reported in Table 5, which also provides *a priori* predictions about the expected significance and magnitude of correlations.

The first set of findings involves various measures of intentions to purchase automobiles.  $BI_Y$ ,  $BI_y$ , and  $BI_{y/Y}$  are Warshaw measures which, operationally in this research, tap consumers' intentions to purchase a new automobile within the next year or so ( $BI_Y$ ), to purchase a foreign-made automobile within the next year or so ( $BI_y$ ), and to purchase a foreign-made automobile within the next year or so given that any new automobile is purchased during that period ( $BI_{y/Y}$ ). The predictions (Table 5) indicate that (1)  $BI_Y$  should *not* be correlated significantly with consumer ethnocentrism (i.e., intentions to purchase an automobile, without regard to origin of manufacture, should not be related to consumer ethnocentrism), (2)  $BI_y$  should be weakly negatively correlated with consumer ethnocentrism (i.e., high scorers on the CETSCALE should be somewhat less likely than low scorers to indicate an intent to purchase a foreign-made automobile; however, even low scorers—i.e., nonethnocentrics—may indicate little intent to purchase a foreign-made car within the next year or so because they have no need to purchase any new car model during that period), and (3)  $BI_{y/Y}$  should be strongly negatively correlated with consumer ethnocentrism because the question wording carefully conditioned the intent to purchase a foreign-made car on the purchase of a new car during the next year or so.

The correlations in Table 5 ( $r = .03, -.22, \text{ and } -.42$ , respectively, for  $BI_Y, BI_y, \text{ and } BI_{y/Y}$ ) show close accord

with the foregoing predictions. The standard Fishbein/Ajzen measure of purchase intention,  $BI$ , is also strongly negatively correlated with consumer ethnocentrism ( $r = -.45, p < .001$ ).

The next four items in Table 5 are adaptations of Warshaw's (1980) general measures of purchase "affordability" and "desirability" and foreign-car-specific measures of those same constructs. The predictions are that (1) the general measures should *not* correlate with the CETSCALE, because high scorers on the scale (i.e., ethnocentrics) should consider purchasing a new car (any car, without regard to origin of manufacture) no more nor less affordable and desirable than low scorers, but (2) high scorers, because of their general bias against foreign-made products, should regard purchasing a foreign-made car as less desirable and probably less affordable than would low scorers. The four correlations in Table 5 generally support these predictions ( $r = -.16, -.03, -.23, \text{ and } -.37$ ).

The final set of results is for Fishbein and Ajzen's cognitive structure ( $\Sigma b_i e_i$ ) and attitude ( $A_{act}$ ) measures. Cognitive structure was constructed with separate measures of respondents' beliefs and evaluations pertaining to nine salient characteristics of automobile ownership (fuel economy, payments, dependability, status, safety, quality of workmanship, serviceability, appearance, and engineering innovativeness).  $A_{act}$  is the summated score of a 4-item, 7-point semantic differential scale representing respondents' evaluations of how foolish-wise, good-bad, harmful-beneficial, and pleasant-unpleasant it would be to "purchase a foreign-made automobile within

**Table 5**  
NOMOLOGICAL VALIDITY EVIDENCE FROM  
CAROLINAS STUDY

	r	n	p	Prediction <sup>a</sup>
<i>Warshaw measures<sup>b</sup></i>				
$BI_Y$	.03	393	.247	No
$BI_y$	-.22	392	.000	Yes (weak)
$BI_{y/Y}$	-.42	391	.000	Yes (strong)
Affordability of new car	-.16	393	.001	No
Desirability to purchase new car	-.03	393	.306	No
Affordability of foreign car	-.23	393	.000	Yes (weak)
Desirability of foreign car	-.37	393	.000	Yes (strong)
<i>Fishbein and Ajzen measures<sup>c</sup></i>				
$\Sigma b_i e_i$	-.31	376	.000	Yes (strong)
$A_{act}$	-.41	371	.000	Yes (strong)
$BI$	-.45	389	.000	Yes (strong)

<sup>a</sup>These predictions specify the strength and significance of correlations expected *a priori* between the CETSCALE and the Warshaw and Fishbein/Ajzen variables. A "no" entry means the correlation should be virtually 0, whereas the "yes (weak)" and "yes (strong)" entries predict varying magnitudes of significant correlations.

<sup>b</sup>Measures of Warshaw (1980) variables were taken two years before the CETSCALE items were measured.

<sup>c</sup>Measures of Fishbein and Ajzen variables (cf. Ajzen and Fishbein 1980) were obtained two years before the CETSCALE items were measured.

the next year or so." Cognitive structure ( $r = -.31$ ) and  $A_{act}$  ( $r = -.41$ ) are strongly negatively correlated with respondents' scores on the CETSCALE; ethnocentric consumers have predictably less favorable cognitive structures and attitudes toward foreign-made automobiles than do nonethnocentric consumers.

The overall pattern of the foregoing results provides strong support for the nomological validity of the consumer ethnocentrism concept and its measurement via the CETSCALE. The results are particularly gratifying in view of the two-year interval between the measure of ethnocentrism and the other measures, which mitigates the possibility of inflated correlations due to common methods covariation.

*National consumer good study.* A telephone survey provided measures of two criterion variables that were used to validate nomologically the 10-item, reduced-form CETSCALE that was measured with a followup mail questionnaire. The first variable (origin-of-manufacture importance) is a measure of the importance of country of origin in the respondent's purchase decision for his/her most recent purchase in the product category (1 = not important at all, 5 = very important). The second variable is a set of three indices (USABIAS, EUROBIAS, and ASIABIAS) that were constructed by summing scores based on respondents' evaluations of which manufacturers (United States, European, and Asian) are "best" and which are "worst" on 11 separate product-specific features (price, quality of workmanship, etc.). Indices for each geographic area were constructed by assigning a +1 to, say, USABIAS if American manufacturers were considered best on a particular feature, -1 if they were considered worst, and 0 if they were neither best nor worst. Manufacturers in each of the three geographic areas received an index score ranging from -11 to +11, the higher scores reflecting more favorable evaluations.

The reduced-form measure's nomological validity is supported. Origin of manufacture becomes a predictably more important purchase consideration with increases in CETSCALE scores ( $r = .44$ ,  $n = 1,803$ ,  $p < .001$ ). Higher scorers on the CETSCALE are predictably biased in favor of American manufacturers ( $r = .38$ ,  $n = 2,279$ ,  $p < .001$ ) and in opposition to European ( $r = -.25$ ,  $n = 2,279$ ,  $p < .001$ ) and Asian ( $r = -.11$ ,  $n = 2,279$ ,  $p < .001$ ) manufacturers.

*Crafted-with-pride study.* The respondents completed the 17-item CETSCALE on one administration. Five weeks later they viewed three 30-second crafted-with-pride commercials and responded to various measures of their attitudes and purchase intentions toward American- and foreign-made apparel items. Correlations between the CETSCALE and theoretically related constructs are reported in Table 6. All correlations are predictably strong and significant. Two of the correlations (attitude foreign 1 and general feelings 1) are artificially inflated by being measured contemporaneously with the CETSCALE items; nonetheless, the correlations between the CETSCALE

**Table 6**  
NOMOLOGICAL VALIDITY EVIDENCE FROM  
CRAFTED-WITH-PRIDE STUDY

<i>Theoretically related variable</i>	<i>r</i>	<i>n</i>	<i>p</i>
Attitudes foreign 1 <sup>a</sup>	-.59	139	.000
Attitudes foreign 2 <sup>a</sup>	-.44	140	.000
General feelings 1 <sup>b</sup>	-.69	139	.000
General feelings 2 <sup>b</sup>	-.45	140	.000
Attitudes American <sup>c</sup>	.50	140	.000
Intent American <sup>d</sup>	.32	138	.000

<sup>a</sup>Attitudes toward foreign-made products were measured both before and after (foreign 1, foreign 2) respondents viewed the crafted-with-pride commercials. Attitudes measured with 3-item semantic differential scale. Coefficient alpha = .92, .90.

<sup>b</sup>General feelings toward foreign-made products were measured both before and after (feelings 1, feelings 2) respondents viewed the campaign. Feelings measured with single 11-point scale (very unfavorable = 0, very favorable = 10).

<sup>c</sup>Attitudes toward buying American-made apparel products were measured after exposure to ads. Attitudes measured with four 7-point Likert-type scales. Coefficient alpha = .81.

<sup>d</sup>Intentions to purchase American-made apparel were measured on three 7-point semantic differential scales after exposure to ads. Coefficient alpha = .84.

and these same items when measured five weeks later (i.e., attitude foreign 2 and general feelings 2) remain large ( $r = .44$  and  $.45$ ) and represent approximately 20% shared variance.

#### THE ROLE OF THREAT

The foregoing results support the reliability and validity of the consumer ethnocentrism construct. A remaining issue is whether consumer ethnocentric tendencies operate uniformly across all consumers or whether certain population segments are disproportionately more or less likely to have ethnocentric tendencies. For many individuals, quality of life and economic livelihood are "threatened" by foreign competition.<sup>6</sup> Persons expected to experience the greatest degree of threat are those in low socioeconomic strata (because their jobs are especially displaceable) and residents of geographic areas where foreign competition is particularly acute.

H<sub>3</sub>: Consumer ethnocentric tendencies are especially prominent among individuals whose quality of life and economic livelihood are threatened by foreign competition.

The hypothesis was tested with data from the Carolinas study. Socioeconomic status was measured with

<sup>6</sup>The concept of threat has a theoretical basis in psychological reactance theory (Brehm 1966). Because an unemployed or imminently unemployed individual's quality and way of life are threatened, the individual should be motivated to evaluate more positively the threatened alternative (i.e., "the American way of life" and associated artifacts such as American-made products) and to evaluate less positively the source of threat (i.e., foreign competition) and its associated products.



Hollingshead's two-factor index (Hollingshead 1949) 2½ years before the CETSCALE was administered to the same households. The three major social classes from Hollingshead's index (classes 2, 3, and 4, corresponding roughly to upper-middle, lower-middle, and upper-lower classes) were compared for differences in their CETSCALE scores. Analysis of variance results show significant differences among the three classes ( $F = 20.35$ ,  $2/322$  d.f.,  $p < .001$ ). The upper-lower class is the most ethnocentric ( $M = 73.63$ ,  $SD = 24.32$ ), followed by the lower-middle class ( $M = 64.01$ ,  $SD = 23.49$ ) and upper-middle class ( $M = 51.91$ ,  $SD = 21.74$ ).<sup>7</sup>

A further test of the threat hypothesis involves the relation between CETSCALE scores and age. According to the threat argument, older working-class individuals should manifest particularly strong ethnocentric tendencies because these individuals are especially threatened by the prospects of losing jobs to foreign competitors and being unable to find new ones. In contrast, because middle- and upper-middle-class workers, especially the latter, have relatively more secure jobs, age for these class members should not correlate strongly with CETSCALE scores. In support of the threat hypothesis, computed correlations between CETSCALE scores and ages for the upper-lower, middle, and upper-middle classes are  $r = .27$  ( $p = .02$ ),  $r = .10$  ( $p = .12$ ), and  $r = .04$  ( $p = .33$ ), respectively.<sup>8</sup>

A final test of the hypothesis that threats accentuate consumer ethnocentrism is provided by comparing CETSCALE scores across geographic areas. An analysis of variance reveals significant differences among the four geographic areas ( $F = 13.27$ ,  $3/1433$  d.f.,  $p < .001$ ). The Detroit area, which is arguably the most threatened of the four areas because of the decline in American

manufacturers' share of the domestic automobile market, exhibits the strongest ethnocentric sentiments and is significantly more ethnocentric than any of the other areas. This difference holds even after controlling for the effects of demographic and socioeconomic differences across the geographic areas.<sup>9</sup>

## DISCUSSION

### *Theoretical and Research Implications*

Sociological phenomena have received insufficient attention from marketing and consumer behavior scholars (cf. Nicosia and Mayer 1976; Sheth 1977). The concept of consumer ethnocentrism and its measurement via the CETSCALE help to close this gap and respond to the plea for domain-specific concepts in marketing and consumer behavior (e.g., Jacoby 1978).

The consumer ethnocentrism concept and the CETSCALE also contribute to the growing body of country-of-origin studies. Though much of the past research in this area is of limited value because of insufficient theoretical underpinnings and methodological deficiencies (cf. Bilkey and Nes 1982; Kaynak and Cavusgil 1983), the insightful recent work of Johansson and colleagues (Erickson, Johansson, and Chao 1984; Johansson, Douglas, and Nonaka 1985) offers justification for additional, more sophisticated investigation of country-of-origin issues. The consumer ethnocentrism concept and the CETSCALE show promise as useful tools for such research. Potential applications include using the CETSCALE as (1) a covariate in experiments that manipulate country-of-origin variables and (2) a predictor variable in correlational studies along with consumer demographic and psychographic measures and other potentially relevant predictors of attitudes, buying intentions, and purchase behavior.

The concept of consumer ethnocentrism can improve understanding of how consumers and corporate buyers compare domestic with foreign-made products and how and why their judgments may be subject to various forms of bias and error (cf. Nisbett and Ross 1980; John, Scott, and Bettman 1986). Highly ethnocentric consumers are probably most prone to biased judgments by being more inclined to accentuate the positive aspects of domestic products and to discount the virtues of foreign-made items.

Various issues related to the developmental foundations of consumer ethnocentrism warrant investigation.

<sup>7</sup>An anonymous reviewer suggests these results might reflect social desirability bias rather than support for the threat explanation. The underlying argument presumably is that (1) upper-middle-class respondents should be more likely than the other social classes to *disagree* with the CETSCALE items (or at least not to agree as strongly) because they are expected to be cosmopolitan, (2) members of the upper-lower class should be more inclined to *agree* with the CETSCALE items because working-class people are expected to favor socioeconomic positions that benefit the common man, (3) middle-class respondents, by virtue of their middle status, should be somewhat bimodal in their response tendency because expectations for members of this class are relatively less univocal.

To the extent these suppositions hold, and thus support a social desirability explanation rather than the threat explanation, we should observe the distributions of CETSCALE scores to adhere to the following pattern: (1) for the upper-middle class, the distribution should be non-normal and skewed toward low scores, (2) for the upper-lower class, the distribution should be non-normal and skewed toward high scores, and (3) for the middle class, the distribution should be bimodal. The actual distributions do not support this pattern. The distribution for the upper-lower class is skewed toward the high end and deviates from normality (based on a Kolmogorov-Smirnov  $D$  test), but the distributions for the middle and upper-middle classes are statistically normal. (Histograms and diagnostic statistics are available upon request.)

<sup>8</sup>We appreciate an anonymous reviewer's suggestion of this test.

<sup>9</sup>Despite the finding that Detroit has the strongest ethnocentric sentiments of all four areas, we found (Table 4) correlations between the CETSCALE and (1) automobile ownership (domestic or foreign-made model) and (2) purchase intent were actually lower for Detroit than the other geographic areas. This apparent anomaly is simply due to the considerably smaller variance in ownership and intention scores for Detroit in comparison with the other areas. Specifically, ownership and intention standard deviations for Detroit are .006 and .297, respectively, whereas the corresponding standard deviations for the other areas are .02 and .438 for the Carolinas, .028 and .473 for Denver, and .03 and .496 for Los Angeles.

The process by which consumer ethnocentric tendencies are socialized is particularly worth examining. Studies are needed to determine how socioeconomic, demographic, geographic, and regional economic factors influence early childhood socialization of consumer ethnocentric values and what role these variables have during adulthood in accentuating ethnocentric tendencies. Related to this work would be further examination of the concept of threat and its influence on consumers' attitudes, buying intentions, and actual purchase behavior toward foreign-made products. The research we report demonstrates that more threatened consumers (i.e., those whose jobs and quality of life are vulnerable to interruption from foreign competition) have the highest scores on the CETSCALE. Additional research is needed to examine correlates of threat other than the geographic and socioeconomic variables examined in our research, to determine how real and perceived threat changes over time, and to evaluate how threat moderates the impact of consumer ethnocentrism on attitudes, intentions, and behavior related to foreign-made products.

#### *Practical Implications*

The CETSCALE has several potential uses for contemporary marketing managers. Companies could administer the CETSCALE as part of their periodic tracking studies. Study results would reveal how strong ethnocentric tendencies are and whether the use of made-in-America and buy-American themes would be prudent in future promotional campaigns. It would be naïve to expect consumer ethnocentrism alone to provide a meaningful basis for market segmentation. However, if the CETSCALE scores are correlated with actionable segmentation variables (e.g., a combination of demographic and lifestyle variables), marketing communication programs could be directed to those market segments that are accessible via appropriate media vehicles and retail outlets.

An especially exciting application of the CETSCALE is for regional marketing and geographic segmentation. Extensive geographic differences in consumers' lifestyles and purchase behaviors have prompted many companies to develop regional marketing programs that customize marketing mix elements to regional preferences (cf. "Closing in on the Consumer" 1986; Lesser and Hughes 1986; "Marketing's New Look" 1987). The growth of regionalized marketing programs and the increasing availability of research services specializing in geodemographic data collection (e.g., Claritas Corporation's PRIZM and National Decision Systems' VISION; see "Closing in on the Consumer" 1986) suggest that marketing managers would be receptive to administering the CETSCALE and using the results to customize communication programs to different regions. Direct mail advertising, for example, could be used to vary buy-American appeals to suit zip code areas that differ in their response to the CETSCALE. The media selection applications are certainly not limited to direct

mail. Regional magazine editions, local newspapers, and spot broadcast advertising also could be customized to the ethnocentric inclinations of specific geographic areas.

The CETSCALE could be of value to retail chains making store location decisions. For example, a chain specializing in imported merchandise could apply the CETSCALE in areas contemplated for new store openings to determine the likelihood that consumers would respond favorably to a store carrying little, if any, American-made merchandise.

Other practical applications for the CETSCALE undoubtedly can be envisioned. Suffice it to say that the scale offers marketing managers a useful tool for better understanding how present and prospective customers feel about purchasing foreign- versus American-made products. Because consumer ethnocentrism, like all aspects of culture in contemporary North America, is probably subject to constant change (McCracken 1986), annual applications of the CETSCALE could reveal the intensity of ethnocentric tendencies in different geographic areas and among different consumer groups. The appropriateness of using buy-American and made-in-the-USA appeals could be ascertained from these results.

The concept of consumer ethnocentrism and its measurement via the CETSCALE are limited to contemporary American society. Whether the scale is applicable to other cultures is entirely problematic at this time. Translating the scale into other languages and testing it in other countries is a needed next step. Future research also should examine whether the scale differentiates the beliefs, attitudes, and purchase behaviors of demographic and socioeconomic groups other than those we tested. For example, it is not known whether the scale is applicable to consumers of high school age and younger or to blacks, Hispanics, and other ethnic groups.

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