

IDENTITY, DEMOGRAPHICS, AND CONSUMER BEHAVIORS: INTERNATIONAL MARKET SEGMENTATION ACROSS PRODUCT CATEGORIES

Four decades ago, Wind and Douglas (1972) declared the application of market segmentation to be as relevant internationally as in domestic markets. With globalization, the subject is ever more important, yet the literature remains underdeveloped. Bolton and Myers (2003) categorized global segmentation research as “still in the early stages of development, both theoretically and methodologically” (p. 123). For various reasons, including the relative ease of acquisition of secondary data, extant research on international market segmentation (IMS) is primarily based on published sources (e.g., UN publications, Hofstede’s [1991] indices). Very few IMS studies draw upon responses from actual individual consumers. What is more, the empirical research on IMS overwhelmingly focuses on two or more Triad nations, thereby excluding representation from 85% of the world’s consumers. Ironically, it is within emerging markets that future growth opportunities are greatest and primary market information is scarcest.

The corollary is that marketing theories—largely developed in Anglo-American contexts—have been applied worldwide (de Mooij, 2004) with the assumption that the antecedents of particular consumer behaviors are universally valid, or that international consumer behavior differences are inexorably fading with the globalization of markets (Levitt, 1983). Whereas statements on the convergence of behavioral patterns worldwide are rife in academic and mainstream publications, there is a dearth of primary empirical research to support these claims (Papadopoulos et al., 2011; de Mooij, 2004). Against this background, a firm seeking to internationalize must first decide which population(s) to segment, along any number of pertinent IMS variables. A truly educated decision would hypothetically entail primary research on the more than 200 existing nation states—if operating under the belief that the nation-state is the appropriate unit of analysis for IMS.

Because marketing success often depends upon harmonizing product attributes with customer attitudes and values, psychographic segmentation is a compelling basis for categorizing consumers

internationally, complementing approaches primarily based on demographics. Moreover, de Mooij (2004) argues that as countries converge along socioeconomic indicators, cultural variables assume greater importance in accounting for cross-country behavioral variation. International marketers also need to consider how globalization is shaping these culture variables and subsequent consumer behaviors (Cleveland and Laroche, 2007; Askegaard et al., 2005; Arnett, 2002). Drawing on samples of consumers living in eight countries on four continents, we investigate two questions pertinent to IMS. First, is a strong affiliation with the home ethnic culture generally incompatible with a globally-oriented (i.e., cosmopolitan) disposition, and furthermore, to what extent is the relationship between ethnic identity (EID) and cosmopolitanism (COS) stable across cultures and countries? Second, what roles do EID and COS play in consumer behavior, alongside commonly-employed demographic segmentation variables, and how do these relationships vary across countries and consumption contexts (represented here by nine distinct product-categories)? **The answers will contribute to IMS and internationalization theory, by advancing our understanding of the nature and role of the two key constructs, EID and COS;** and will assist international marketers to pinpoint the appropriate criteria for profiling segments across countries and recognize when and where marketing strategies should be customized at the country level, standardized across national markets, or blend elements of standardization and localization.

1. THEORETICAL BACKGROUND AND CONCEPTUAL MODEL

1.1. International Market Segmentation

Successful marketing ultimately depends on profitably satisfying consumer needs and wants. Recognizing that the drivers of consumer behavior are considerably diverse within, between, and across cultures and contexts, the purpose of segmentation is to identify and ultimately serve individual consumers who have similar needs and behaviors (Wedel and Kamakura, 1999). International managers have conventionally approached segmentation at the country level. Under this approach, known as vertical segmentation, each country is essentially treated as a separate market, thus requiring the development of separate marketing mixes in order to appeal and satisfy particular within-country

segments. The interactions between peoples and markets have greatly intensified with globalization, leading an increasing number of marketing scholars to advocate that international marketers should instead practice global or horizontal market segmentation – i.e., identify and serve similar groups of consumers with a common marketing strategy irrespective of country boundaries (Merz et al., 2008; Bolton and Myers, 2003). The primary benefits of adopting a standardized strategy include economies of scale and other efficiencies, once a consistent brand identity has been established worldwide. On the other hand, local brands are more inherently flexible and can be advantageously positioned as uniquely satisfying the needs of local consumers (Schuiling and Kapferer, 2004). The IMS continuum ranges from fully global to entirely local. Reflecting the regional linkages established in the past 3 decades (e.g., EU, NAFTA, Mercosur), many international brands generate most of their revenues from markets proximate to their home base (Cayla and Eckhardt, 2007). Researchers should thus be on the lookout for market segments that are regional in scope. To date, however, the body of empirical evidence corroborating the existence of global and/or regional market segments remains slender (Askegaard et al., 2005; Cayla and Eckhardt, 2007; de Mooij, 2004).

While demographic variables have long had a prominent role in international segmentation, a consumer-oriented strategy that is carefully coordinated with target customer attitudes and values has a greater prospect of success. Two psychographic factors that are especially relevant for market segmentation in the global era include consumers' affiliation to national/ethnic culture and their globally-oriented dispositions.

1.2. Ethnic Identity (EID)

Subtly yet systematically shaping the thoughts and behaviors of group constituents, identity is the psychological focal point of cultural effects (Markus and Kitayama, 1991), and a large body of research testifies to its far-reaching role in consumer behavior (e.g., see Cleveland and Chang, 2009; de Mooij, 2004; Oswald, 1999). EID represents the incorporation of ethnicity into the individual's self-concept, and is therefore distinguishable from ethnic origin and other objective yet imprecise categories like race,

birthplace, and religion. The latter are typically defined by the researcher, and generally measured dichotomously or at the nominal level. Within nation-states, however, there have always been varying degrees of cultural diversity. Even within ethnically-homogenous states like Japan, people vary substantially in the extent to which they identify with a particular group, and in how much they practice social norms. EID is therefore subjective, capturing the perceptions of group members along several dimensions. Its multifaceted nature is well supported in the literature, as are behavioral differences between ethnic groups. Notwithstanding global integration and the parallel loosening of cultural bounds, identity remains a fundamental matter for marketers (Bouchet, 1995). Reacting to globalization, some consumers may elect to entrench localized values and behaviors; others may supplant local norms with foreign/global alternatives, while still others may supplement a traditional cultural orientation with one that is ecumenical or world-minded (Cleveland and Laroche, 2007).

1.3. Cosmopolitanism (COS)

The increase of exchanges between countries, cultures, and individuals worldwide has distorted the traditional distinction between home and away, and some theorists (e.g., Tadmor and Tetlock, 2006; Arnett, 2002) believe that an increasing number of individuals now combine their national or localized EID with one that is linked to an emerging global culture. Just like the emergence of nation-states in earlier centuries gave rise to national cultures and identities, it is conceivable that the current integration is engendering a global culture and corresponding transnational identity (Craig and Douglas, 2006) linked to "...a conscious openness to the world and to cultural differences" (Skrbis et al., 2004, p. 117). These world-minded consumers have been labeled cosmopolitans. These are individuals holding a specific set of attitudes, beliefs and skills, namely an openness toward and ability to engage in divergent cultural encounters, coupled with more international and less provincial self-perceptions (Yeğenoğlu, 2005). Belonging to an elite class, and extensive first-hand contact (via travelling) with other cultures, are no longer preconditions for cosmopolitanism (COS, conceived as a dispositional basis for international market segmentation). Global media today enable a broader scope of individuals to develop COS values

without leaving their native countries (Craig and Douglas, 2006). More broadly, acculturation can be experienced by persons and groups in their home environments as well as by migrants (Gillespie et al., 2010).

Portraying COS as globalization occurring within national societies, Beck (2002) states that cosmopolitans subordinate national values to COS values. Acculturative models depict cultural adaptation as a process where the acquisition of alternative culture traits need not be accompanied necessarily by a diminution of traditional cultural traits (Gillespie et al., 2010; Tadmor and Tetlock, 2006; Berry, 1997; Mendoza, 1989). Accordingly, we argue that a strong EID does not necessarily preclude a strong global identity, and vice versa. Indeed the advent of so-called third cultures (e.g., global consumer culture) will not supersede, but rather compliment and coexist alongside, ethnic cultures.

1.4. Behavioral Outcomes across Product-Categories

The different roles taken on by individuals evoke varying degrees of EID (Oswald, 1999; Mendoza, 1989) as do different situations (Askegaard et al., 2005; Stayman and Deshpandé, 1989). For example, EID is much more likely to be operant during religious or secular holidays. We posit that since the salience (and consequent effects) of EID on behavior is contextually-bound, the roles played by EID and COS are not only variable across individuals but also contingent upon the consumption context. Here, these contexts are represented by 9 distinct product categories (local/global foods and fashions, personal care, appliances, consumer electronics, communication devices [i.e., associated behaviors] and luxuries).

One challenge facing international marketers is to comprehend which of EID, COS, or both, will drive behavior for which product categories. We predict that the role of local culture will be generally greatest for those categories that, due to their culture-bound properties, are more resilient to outside influences – such as local foodstuffs and apparel. Food habits are the product of historical, geographic and cultural factors, and are often strongly tied to local traditions, and clothes are permeated with symbolic attributes and are also subject to culturally-expressive interpretation (de Mooij, 2004; Peñaloza, 1994). On the other hand, foreign/global foods and fashions permit individuals to express different identities,

depending on the situation. Instilled with the symbolic qualities of modernism, and fulfilling the universal needs for enhanced technology and prestige (Steenkamp et al., 2003), we expect that the categories of household appliances, consumer electronics, and especially those associated with high technology, are more likely to transcend EID. Luxury products too are desired for status and recognition purposes, and these universal values are increasingly promulgated through global mass media (Dubois and Duquesne, 1993). We speculate that COS would be more likely to impact the consumption of those product categories that are perceived the same way, desired for similar reasons (that is, appealing to culturally-invariant needs/wants), and used in a similar manner by consumers wherever they may live, particularly consumer electronics and modern communication devices.

1.5. Demographics

Satisfying the segmentation criteria of identifiability, substantiality, accessibility and actionability (Wedel and Kamakura, 1999), four of the most common demographic variables employed in domestic and international segmentation include age, gender, income, and education. It is well established that the types of goods and services sought by individuals change as they age and pass through the various life cycle stages. Compared to their older counterparts, younger individuals are less committed to definite patterns and are more open to new perspectives and products (de Mooij, 2004), particularly those involving advanced technology. Income also strongly affects product choice, as higher-income consumers are better able to purchase expensive, status-enhancing items (e.g., household appliances, consumer electronics, and luxury products; de Mooij, 2004). Higher education levels expose individuals to different cultural perspectives and make them less likely to follow local behavioral norms and more global as consumers (Keillor et al., 2001). Lastly, the differential effect of gender is among the most robust findings in the literature. Males and females differ on many aspects of consumer behavior, including shopping patterns, information processing, judgment, responses to advertising, and the products they tend to buy (Cleveland et al., 2003).

In summary, to shed light on the convergence/divergence debate, this research assesses the consistency of the predictor-behavior relationships articulated in the preceding sections. Specifically, the antecedent roles of 4 demographic variables, alongside COS and EID, are examined across 8 countries, in relation to buyer behavior in 9 product categories.

2. METHODOLOGY

2.1. The Survey

Adapting 43 measures previously validated in numerous cultural studies (e.g., Cleveland and Chang, 2009; Peñaloza, 1994), EID was operationalized as the extent to which various aspects of a person's culture are sustained, promoted, and/or shed. The salient facets of a particular ethnic group collectively contribute to the group members' level of felt EID, and the degree to which these dimensions are emphasized vary across groups, individuals, and situations (Stayman and Deshpandé, 1989). We include measures for the six EID dimensions that figure most prominently in the literature (**number of items in parentheses**): language (intra-ethnic communication in the local language; 12), intra-ethnic social interactions (6), ethnic media exposure (6), participation in ethnic customs and celebrations (6), importance of traditional values and norms (6), and outright self-identification with and pride in one's ethnic culture (7). To measure COS, 7 items were borrowed from the scale developed by Cleveland and Laroche (2007). All EID and COS items were measured with 7-point Likert scales (1-7 highly disagree - highly agree). Where necessary, measures were calibrated by sample to reflect cultural descriptors (e.g., traditional *Greek* food, attachment to *Korean* culture). Scale items retained for analysis appear in Appendix 1. The demographics measures consisted of 2 nominal (sex, employment status) and 3 ordinal (age, household income, educational attainment) variables.

Similar scales were employed for the dependent measures, with variations to accommodate the varying frequency of the associated behaviors. Food, apparel, and personal-care product behaviors were assessed on a 1 (never) to 7 (daily) scale reflecting frequency of consumption (food and drink), visits (restaurants), and use or wear (personal care and clothing), for a total of 25 products: 5 local foodstuffs

(traditional foods, beverages, meals, snacks, restaurants) and 11 global items (pizza, sushi, tacos, souvlaki, beer, hamburgers, croissants, coffee, wine, soft drinks, fast-food restaurants); one local fashion item (traditional ethnic fashions) and 3 global ones (blue jeans, athletic/running shoes, business suits/attire); and 5 personal care items (hair shampoo, deodorants, mouthwash, soap, toothpaste). For appliances and consumer electronics, instead of purchase frequency respondents were asked to indicate how essential (important) it is to them to own certain products, using a 1 (not at all) to 7 (very) scale; the object set included 6 appliances (washing machine, clothes dryer, dishwasher, vacuum cleaner, refrigerator, microwave oven) and 8 consumer electronics (personal stereo player, VCR, CD player, video-game console, DVD player, TV, digital camera, personal computer). For technology, 5 items (mobile phone, computer, internet surfing, emailing, bank machine) were assessed on a 1 (never) to 7 (daily) usage scale. Lastly, luxury purchasing was assessed on a frequency scale of 1 (never) to 7 (several times per year), for 6 products (cosmetics, fragrances, jewelry, antique furniture, fur/leather coats, expensive wine/champagne).

2.2. The Sample

The eight sampled countries were selected purposively so as to differ in terms of geography, climate, history, economic development, demographics, and socio-cultural characteristics (based on Hofstede, 1991), and to represent a suitable context for investigating the different ways that consumers experience globalization around the world. We surveyed urban consumers in Thessaloniki (Greece), Budapest (Hungary), Gothenburg (Sweden), Puebla (Mexico), Talca (Chile), Montreal (Canada), Seoul (Korea) and Mumbai (India). **The countries differ considerably in terms of cultural diversity, with Korea at one extreme of ethnic homogeneity, and Canada at the other end with its multicultural heritage.**

To obtain a reasonably diffuse sample in light of cost constraints and the difficulty of random sampling in some of the countries, a snowball sampling procedure was employed. Graduate and senior undergraduate business students were recruited and trained for the fieldwork. Each student filled out his/her own questionnaire, and, using a detailed written protocol, had to collect 3-5 completed

questionnaires from designated types of eligible respondents (i.e., majority age, English-speaking, and native-born) with at least one respondent from each of the following groups: family members, friends and neighbors, and coworkers. In total 2800 questionnaires were distributed, 2290 were returned, and 2015 were retained for analysis after discarding incomplete responses, representing very satisfactory response rates (82% total, 72% usable). Overall, the sample was 52% female. The age distribution was 55% 24 years and under, 19% between 25-29 years, 14% between 30-39 years, and 13% 40 years and above. Most respondents were members of the workforce (30% employed full-time and 33% part-time). Family income was reported in the local currency and adjusted for purchasing power for all statistical analyses that follow using the World Health Organization (2010) exchange rate coefficients for the year that the data was collected; income was distributed relatively evenly across the lower (28%) middle (40%) and higher (32%) income levels. Using North American equivalencies, the distribution of education levels was 2% less than high school, 20% high-school, 29% college/technical diploma, 29% undergraduate degree, and 19% graduate degree. *As can be seen, the respondents are urban consumers who fit the general characteristics of opinion leaders, a desirable quality since they influence the views of others in the mass market and are therefore of particular interest to international marketers; therefore, the sample meets the key properties of adequacy and relevance in light of the study's objectives (Singh, 1986; Papadopoulos et al., 2000; Elliot and Papadopoulos 2010).*

3. ANALYSIS AND RESULTS

3.1. Exploratory Factor Analysis

Table 1 summarizes the descriptive statistics and measures of internal consistency for the constructs. The reliability of the 7-item COS factor was robust across all countries, except for Korea where it was marginal at .666. Mean COS scores were consistently high, excepting the Korean respondents, who were less world-minded. Exploratory factor analyses (Principal components, oblimin rotation) on the EID items yielded a 4-factor solution (eigenvalues > 1.0), accounting for 63.7% of the variance: IDMC (identification with and desire to maintain ethnic culture), LLANG (local culture

language use), LMEDIA (local culture media usage) and LINTERP (local culture interpersonal relationships). Despite the large number of countries sampled, the reliability coefficients (α) were pleasing, varying from .954 to .645, with most exceeding $\alpha=.700$. **The product category coefficients were also acceptable: global/local foods ($\alpha=.704/.826$), global fashions ($\alpha=.600$), personal care ($\alpha=.601$), appliances ($\alpha=.702$), electronics ($\alpha=.699$), technology behaviors ($\alpha=.726$), and luxuries ($\alpha=.760$).**

3.2. Multigroup SEM Analyses

3.2.1. Configural Invariance. To further gauge the cross-cultural applicability of the constructs we employed multigroup confirmatory factor analyses (Steenkamp and Baumgartner, 1998), using AMOS17. In the first step, we focused on establishing configural equivalence, by testing baseline measurement models for COS and the dimensions of EID, for the overall dataset and then for each country. Several indicators were used to evaluate the goodness of fit of the models, including the adjusted chi-square test (χ^2/df [degrees of freedom], recommended ≤ 6), the comparative fit index (CFI, recommended $\geq .90$), and the root mean square error of approximation (RMSEA, recommended $\leq .08$). The acceptability of the individual parameters was guided by the size of the standardized regression weights (i.e., factor loadings, and the significance thereof), and the item-factor stability across the datasets. An excellent overall baseline model fit was obtained for the COS factor ($\chi^2/df=5.166$, CFI=.989, RMSEA=.045), and, with the exception of Korea, these respectable statistics were repeated for all countries (Appendix 2). To establish a satisfactory baseline model for the EID dimensions, it was necessary to perform a sequence of iterations involving the deletion of individual items and/or the inclusion of error covariances. Modification indices were sparingly employed to identify areas of misfit and to improve the model. The correlation of error terms is appropriate when it can be theoretically justified, such as when individual items are very closely related in meaning (Bollen and Lennox, 1991); four error covariances were ultimately specified between EID measurement items, all but one corresponding to language items. Each time the model was respecified, the results were carefully examined for each country. The relationship of LMEDIA to the other EID factors was unstable across the different groups. This factor was therefore jettisoned, along

with several measurement items (with IDMC and LINTERP shedding one item apiece, and LLANG losing two items: Appendices 1-2). Overall baseline model statistics ($\chi^2/df=5.797$, CFI=.969, RMSEA=.049) indicate a good fit to the data. At the country level, model fit statistics were excellent for Hungary, Chile and Canada; satisfactory for Greece, Sweden, and India; and somewhat mediocre for Mexico and Korea. Factor loadings for all COS items, and for all items loading on the three retained EID dimensions, were significant at $p<.01$ for all of the country models, thus meeting the basic requirement for configural invariance.

3.2.2. Metric Invariance. The next step consisted of testing a hierarchy of models with increasing constraints on the number of invariant parameters, following the Byrne (2001) procedure. With respect to COS, the fit statistics for Model 1b (constraining all measurement weights [factor loadings] to equality across the eight groups, $\Delta\chi^2=92.83$, $\Delta df=42$, $p<.01$) and Model 1c (constraining structural covariances and measurement weights to equality, $\Delta\chi^2=62.94$, $\Delta df=7$, $p<.01$) were highly acceptable but significantly inferior to those of the unconstrained COS model 1a (Table 2), thus indicating the presence of some invariant parameters across the eight groups. For the unconstrained model 1a, the factor loadings across the groups were all significant ($p<.01$) and out of a total of 56 standardized loadings (i.e., 7 items x 8 countries), only 7 were lower than the recommended 0.50 threshold, corresponding to the two Asian countries (denoting the item sequencing in Appendix 1, 4 items for Korea: COS_{3,4,6,7}, and 3 for India: COS_{3,6,7}). Looking at Model 1b (measurement weights constrained), factor loadings were all highly significant ($p<.01$), with only six parameters falling below 0.50 (Mexico: COS₇; Korea: COS_{1,3,6,7}; and India: COS₇).

Turning to EID, overall model fit statistics deteriorate with the imposition of increasing equality constraints (Table 2). The significance of the $\Delta\chi^2$ between measurement weights-constrained model 2b and the unconstrained model 2a implies the presence of some invariant parameters, with most of the instability corresponding to items for local language use (LLANG). For the unconstrained model 2a, all factor loadings across the eight groups were highly significant ($p\leq.01$), with only 13 out of 168

standardized loadings falling below the 0.50 threshold (Hungary: LLANG_{4,5,8}; Sweden: LLANG_{1,2,6,8}; Chile: LLANG_{4,5,6}; Korea: IDMC_{2,9}; India: LINTERP₂). For model 2b, once again all factor loadings across all groups were highly significant ($p \leq .01$), and here, only 11 standardized loadings were below 0.50 (Hungary: LLANG_{2,5} and INTERP₁; Sweden: LLANG_{2,3,4,5,8}; Chile: LLANG_{4,5}; Korea: IDMC_{6,9}; India: LINTERP₁).

In reality the assumption of full metric invariance is an ideal to be striven for, as opposed to a realizable condition (Steenkamp and Baumgartner, 1998), particularly when the number of comparison groups is large. With eight groups, for each parameter 28 pairwise combinations would take place, making it highly unlikely that all possible pairwise parameters would be invariant. With our results, the assumption of partial metric invariance is reasonably supported (Byrne et al., 1989).

For the remaining analyses, each construct was operationalized as the mean of the composite items retained from the SEM analyses (Appendix 1).

Tables 1 and 2 about here

3.3. Is a strong EID incongruent with a COS disposition?

The aggregate EID construct was formed by the mean of the three composite dimensions. As with COS, mean EID scores across countries were consistently high, excepting the Canadian sample (ascribable to the multiethnic/multilingual makeup of Canadian society, and of the sample). **However, it is important to bear in mind that the urban sample of opinion leaders likely understates EID and boosts COS levels, compared to the general populations.** Controlling for intergroup demographic differences, partial correlational analysis was used to assess the relationship between COS and EID. For the aggregated sample, the correlation between COS and composite EID construct was positively significant (Table 1); however, across the country samples the relationship varied. On the one hand, in the Canadian and all three European samples the relationship was nonsignificant. This statistical independence sustains the theoretical claim that the strengthening of a global orientation does not necessarily imply a corresponding

erosion of ethnic identity, or vice-versa. On the other hand, a significant positive correlation was evidenced for the Mexican, Chilean, Korean, and Indian samples, implying that either integration (Berry, 1997) or the mutual reinforcement of local traits and values with global dispositions is occurring. In no case was there a significant negative correlation (i.e., culture-shift or assimilation). In sum, there is no evidence to imply that the strengthening of one leads to the weakening of the other.

As for the relationship of COS to the various EID facets, all but one of the significant correlations are not negative—which would imply assimilation—but positive, providing further evidence of cultural integration. Where significant, the relationship between COS and IDMC was always positive (overall, and for 5 of 8 country samples). For the most part, the COS-LLANG link was nonsignificant (excepting the positive correlation for Mexico and Korea). For COS and LINTERP, the relationship was positive in three instances (Mexico, Korea, India), nonsignificant in others (Hungary, Sweden, Chile, Canada), and negative in one instance (Greece). The overall picture is that a strong EID as well as an outwardly COS disposition are generally harmonious.

To pinpoint global segments based on individual EID and COS scores, a *k*-means cluster analysis was run. Four groups were designated *a priori* (Figure 1 and Table 3). For the first group, the *locals* (reflecting a more local than global orientation, and describing 33% of the overall sample), EID scores were considerably higher than COS scores. Proportionately, males were more represented in this group than females. Adjusting for sample size, Koreans were disproportionately overrepresented and Canadians underrepresented. The second group had high mean scores for both EID and COS, and were thus designated the *glocals*. This cluster contained the largest proportion of respondents at 45% overall (and with one-half being females), once again buttressing the premise that globalization propels many people to acquire a world-minded disposition without concomitantly drifting from their local identity (Arnett, 2002). Proportionately, the Latin Americans (Mexicans, Chileans) were overrepresented in this cluster, whereas Canadians and Koreans were underrepresented. The third cluster was the smallest (8% of the overall sample) and denotes the *marginals*, for whom both COS and EID scores were low. While the

proportions from each country in this group were low, Canadians and Koreans were more prominent, with very low levels of representation from the other countries. The last group, describing 15% of the overall sample, were the *transnationals*: reflecting a more global than local orientation, EID scores here were considerably lower than COS scores. Proportionately, males and females were equally represented in the transnational group. Country-sample proportions falling into this cluster were highest for Canadians (with the majority suggesting a transnational identity), and lowest for Koreans. Overall, the findings for the latter two countries were the most anomalous.

Figure 1 about here

3.4. What are the predictive roles of EID, COS and demographics on consumption?

The cluster results are static, lacking consideration of context-specific cultural influences on behavior. The antecedent relationships of EID and COS—as well as demographics—on consumption was assessed with stepwise multiple linear regressions (MLRs). This procedure attenuates the inclusion of multiple, highly correlated predictors (i.e., following the initial predictor, subsequent variables will not be entered into the MLR unless uniquely explaining additional variance in the dependent variable). EID, COS, the COS*EID interaction term (C*E) and the four demographic variables were entered as the predictors of each of the 9 dependent variables (i.e., consumption behaviors grouped along 9 product categories, operationalized as the average behavioral scores of the category items, with the exception of ‘traditional fashion’ which was a single item). The first series of regressions combined the data from the 8 groups. Subsequent MLRs were conducted for each country sample. As shown in Tables 4 and 5, in many instances the aggregated data results clearly do not apply at the country-level. The following sections focus on key similarities and differences across countries and regions.

Table 3 about here

3.4.1. Local foods/fashions. As anticipated, local food consumption was dominated by EID, with a strong significant positive relationship for all samples except Korea (the most culturally-homogenous country

investigated). This finding confirms that local fare consumption is intrinsically bound to local culture, as further evidenced by the explanatory power (R^2). For local foods, no consistent pattern emerged for the remaining variables across the samples, although there was an inverse relationship with COS for North Americans (Canada/Mexico). For local clothing, once more EID was strongly and positively linked to the propensity of wearing local/traditional garb, a relationship echoed for the majority of groups. The magnitude of relationship to EID was greatest for Canadians. Within 5 samples (Greece, Sweden, Mexico, Chile, India), gender was an important antecedent, with a greater propensity for females to wear traditional fashions.

3.4.2. Global foods/fashions. Regarding the consumption frequency of global foodstuffs, there was no consistent pattern across the countries. Here, the most widespread linkages were the demographic variables of gender (males out-consuming females in 3 of 4 groups) and age (with younger Greeks, Hungarians, and Indians consuming more than their older counterparts). Among the two Asian countries, those clinging to their ethnic identity avoid global foods. In terms of magnitude, the impact of culture was greatest for the two Asian samples. COS was positively associated only for Chileans and Indians, whereas C*E was positively significant in two instances (Sweden, Korea), evoking cultural integration. With respect to global fashion, the chief predictor was age, followed by C*E (positively significant in four instances, thus evoking integration). In all significant instances, younger individuals were more likely to wear globally-popular attire than their older counterparts (sustained for all but 2 samples). Among Hungarians, Swedes, and Latin-Americans, C*E was linked to wearing global fashions, whereas among Koreans COS was positively associated.

3.4.3. Personal care and appliances. With the exception of age, there were relatively few significant and consistent predictors for personal care consumption. Within 4 groups (Sweden, Mexico, Canada, India), younger individuals used hygiene products more frequently than their older counterparts. COS was a positive driver for personal care products in 2 groups (Greece, India), whereas EID played a positive role for Mexicans (accounting for 18% of the consumption variation, much higher than the other country

samples). For household appliances, the antecedents were principally demographic. Income was the most robust predictor, positively significant in 5 groups (Greece, Sweden, Chile, Canada, Korea), followed by age, with older consumers placing a higher importance on ownership in four groups (Greece, Hungary, Chile, Canada), and gender (females>males in Greece, Hungary, Korea, India). COS was positively antecedent in two groups apiece, whereas EID and C*E were significant for one group each.

3.4.4. Consumer electronics and technology behaviors. Age dominated the behaviors associated with consumer electronics. In all 5 significant instances (all European and Asian countries, but not in the Americas), younger individuals ascribed a higher importance to ownership than their older counterparts, corroborating the notion that the former are first-mover adopters of modern consumer electronics. COS was a significant positive driver for 3 groups (Greeks, Mexicans, and especially Indians). Age was also the most ubiquitous predictor for technology behaviors. Significantly negative in 7 groups (all but Hungary) such behaviors were much more pronounced among younger respondents. This category was also one of the few in which education played a role in behavior; with a significant positive relationship among Greeks, Swedes, Mexicans, and Chileans. Gender was significant in two samples (Chile, Korea), where behaviors were more prevalent among males. In five instances technology behaviors were predicted by the psychographic constructs. COS was a positive precursor in two European groups (Hungary, Sweden), C*E was positively predictive for Mexicans and Koreans, whereas EID was negatively linked for Hungary. Culture accounted for a greater proportion of the overall variance for Koreans, compared to the other groups.

Tables 4 and 5 about here

3.4.5. Luxuries. Luxury goods are inherently expensive in absolute and relative terms. Yet only in Greece, Sweden, and Mexico did our findings confirm a positive link between household income and luxury good consumption. Dubois and Duquesne (1993) had found a strong positive link between luxury consumption and openness towards culture change. Here, our results provide meager support for their findings. Where

significant (Hungary, Mexico, Korea), the negative link between EID and luxuries implies that consumption was greater among consumers with lower EID levels. COS was positively linked to luxury goods only in Greece. The role played by culture in accounting for luxury consumption was greatest for Koreans (21%), well in excess of the other groups. Across the groups, by far the most robust predictor of luxuries was gender, with females consuming more than males in all but one country (India).

Our findings identify gender and age as the most critical demographics for IMS, with 28 and 31 significant linkages, respectively, across the 72 episodes (8 countries x 9 categories; Table 5). There were 47 cases of psychographics playing a significant role (20 EID, 17 COS, 10 C*E). In sum, the behavioral outcomes of the psychographic and demographic predictors were largely category-specific, and, to a lesser extent, country-specific. As best as can be determined from the data, there were few indicators of regional convergence along the different product categories.

4. DISCUSSION, LIMITATIONS, AND CONCLUSIONS

With the escalating interconnectedness worldwide of consumers, cultures and corporations, it is vitally important to extend marketing theory—hitherto principally generated and tested in the U.S.—to the international domain. Our findings provide insights for IMS theory and for international managers concerning when (i.e., product categories) and where (i.e., locations) marketing strategies should be standardized across national frontiers, and when and where these strategies should be customized or glocalized. Encompassing a broad assortment of product categories, these issues were investigated with eight countries having very different cultural characteristics, social histories, and levels of economic development.

To define the scope and size of different product-markets (within and across country markets), it is first necessary to recognize the appropriate qualifying dimensions, which most often are described in demographic terms. Our study considered four such demographics, and revealed that the roles played by these variables differ considerably not only across product categories but also across country samples. The most robust demographic findings were the greater consumption frequency of luxuries by females vs.

males (consistent in 7 countries) and the greater frequency of technology behaviors among younger vs. older consumers (7 countries). Also relatively consistent was the greater propensity of younger consumers to don global apparel (6 countries) and to desire ownership of consumer electronics (5). In 5 countries, females wore traditional fashions more often than their male counterparts. As expected, the role of income was most pronounced for the expensive categories of appliances (5 countries) and luxuries (3). For the remaining categories, the demographic relationships were common for half or fewer sample groups.

As the lens filtering individuals' perceptions of the world, culture affects the attitudes towards, and values and behaviors associated with, consumer products. In fact, de Mooij (2004) argues that culture differences matter more as countries converge in terms of income. The effects of culture, represented by three psychographic constructs (EID, COS, C*E), were most pronounced for the consumption of local foods and fashions, both of which were dominated by EID across most countries. Communication appeals should therefore emphasize how these products embody local customs and values. With respect to global fashions, C*E was significantly positive (implying that behavior derives in part from the integration of cosmopolitanism and ethnic identity) for Hungarians, Swedes, Mexicans, and Chileans. This result suggests that—for these countries and possibly other countries—marketers should employ cosmopolitan appeals in their communication strategies for globally-popular fashions, while suggesting how the apparel product will help the target consumer fit into local groups and conform to local standards. More an expression of personality and culture than a means of protecting the body, clothing, more than many other products, carries considerable social risk.

The other significant construct effects were not common across the majority of groups, and the marketing implications cannot be easily generalized cross-culturally. In three groups (Hungarians, Mexicans, Koreans), EID negatively predicted luxury consumption. The implication is that traditionally-minded consumers at least in these countries would not constitute an attractive segment for international luxury products. COS positively influenced the desirability of consumer electronics among consumers in

Greece, Mexico, and India. COS was also influential for the propensity of technology behaviors in four groups, as a standalone construct (Hungarians, Swedes) or integrated with EID (Mexicans, Koreans). Lastly, COS positively affected global food consumption in four groups, either independently (Chileans, Indians) or jointly with EID (Swedes, Koreans).

Furthermore, the relative importance of the cultural constructs varied substantially cross-nationally. As a predictor, EID appeared most often for Hungarians (4 out of 9 categories), while COS appeared most frequently for Indians (5/9). This may partially reflect uneven levels of economic development and subsequent timing and degree of integration into the global economy with respect to the countries investigated, and/or may in part be a function of national-culture characteristics (e.g., individualistic Sweden vs. collectivistic Korea), within-country cultural variation (e.g., multiculturalism in India and Canada), historical cultural legacies (e.g., the relative ambiguity of Canadian vs. Greek culture), and recent geo-political events.

People increasingly have the opportunity to make individual choices concerning what values to adopt and what identities to embrace (Arnett, 2002). A negative linkage between COS and EID entails either assimilation (global dispositions supplant local orientations) or separation (local identity re-emerges as individuals resist global culture). While the cross-sectional data precludes definitive deductions, our findings, controlling for intergroup demographic differences, imply that something other than assimilation or separation is taking place. The positive or non-significant COS-EID relationships denote that consumers are complementing an identity rooted in their traditional culture with one that is globally-oriented. This also was the case for the linkages between the different facets of EID and COS: these facets were almost uniformly positively or non-significantly related to COS. In terms of predicting consumption, all 10 instances of significant C*E interactions were positive. Moreover, the cluster analysis placed the largest (smallest) proportion of respondents into the *glocal* (marginal) group, and these proportions were roughly sustained for six of the country samples. Together, these findings bolster the notion that many cultures have the innate facility to *glocalize*, that is, to absorb foreign or global ideas

with the best practices and bond these with native customs. Askegaard et al. (2005) describe cosmopolitan consumers as 'best-of-both-worlders'. On the other hand, for the moment, it appears that Koreans remain resolutely locally-oriented, whereas Canadians are more transnational than glocal in their identity.

Working with student interviewers, most of who were also workforce members, to collect data using the snowball procedure described above, our sampling approach contended with the typical difficulties of representative sampling in some of the countries and was thus a considerable improvement over convenience sampling. Still, future research should strive for more representative samples, as the sample composition in this study likely inflated overall COS over EID levels. The English-fluent character of the sample may also limit generalizability for countries where English is not widely spoken. Growing up with globalization it is plausible that many younger people have a global consciousness compared to older generations. However, post-hoc analyses did not reveal any relationship between age and either COS or EID; this finding may be partly attributable to the restricted age range in the sample.

One fruitful area for future research is to apply these constructs to actual brands. In this case, we used product categories in order to mitigate potential confounding effects from differences in availability, positioning, and so on of specific brands across the large number of countries investigated.

Consumers often distort brand evaluations by relying heavily on general product-category attribute beliefs, while neglecting product-specific attribute differences (Elliot and Roach, 1991). Dispositions flowing from identity (COS, but also patriotism etc.) likely play a strong role in shaping consumption behavior in a world abounding with foreign products and brands. The task for marketers is to identify the circumstances priming national/local affiliation versus a more cosmopolitan temperament. Individuals reaffirm national identity by consuming local brands, but foreign/global brands connote membership in the global elite and enhance one's status and self-image of being modern and sophisticated (particularly among consumers in developing countries). Cosmopolitans' inquisitiveness towards varying perspectives and their ability to reconfigure diverse cultural fragments intimates that these consumers would be vitally important in their capacity as innovators and opinion leaders for new products. From a

brand strategy perspective, future studies can apply EID and COS to the themes of brand personality, as well as global vs. local brand positioning.

The dependent variables employed were principally connected to tangible consumer goods, and future researchers can extend the questions posed herein to services. The international trade in services is growing rapidly, and compared to goods, cultural factors are said to exert an even stronger influence on consumer behaviors associated with services due to their intangible and interpersonal qualities. Further, cultural norms (e.g., individualism-collectivism) influence the formation and nature of relationships between customers and service providers, and likely play a role in both the expectations and the evaluation of service quality (Bolton and Myers, 2003). Finally, future research may investigate the optimal degree to which marketing mix elements might be standardized, adapted, or glocalized across a sets of national markets.

The relationships reported between COS and EID clearly show that contrary to Levitt's (1983) famous argument from nearly thirty years ago, globalization does not inevitably lead to cultural homogenization. Ironically, in some countries (e.g., Canada, Spain), globalization may be precipitating ethnic fragmentation from within, where regional identities are reasserted (e.g., Québécois, Catalanian) at the expense of national identities, coinciding with the ebbing of the importance of the nation-state. Our findings also show that for most categories, the relationships between demographic antecedents and behavioral outcomes have not converged. This study identified that products involving modern technology (consumer electronics, communication devices), globally-popular foods and fashions, and (to a lesser extent) status goods (luxuries and appliances), are the most suited for horizontal (i.e., transnational or global) segmentation and, thus, for marketing strategies with some degree of standardization. However, given the overall finding of considerable heterogeneity across the country samples concerning the predictive roles of the cultural constructs and demographic variables, we believe that it is premature to abandon vertical (i.e., multi-domestic) segmentation approaches for most product categories. Instead, and at least for the near future, we advocate a glocalized segmentation approach – i.e.,

delineating groups of consumers via the combination of inter- and intra- market indicators. The effects of globalization are omnipresent, but the manner and degree to which cultures and behaviors are impacted varies substantially across individuals, places, and situations.

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Table 1: Descriptives and Correlations

		European			Americas			Asian	
	Overall	Greece	Hungary	Sweden	Mexico	Chile	Canada	Korea	India
<i>n</i>	2015	317	332	329	231	192	241	137	236
Construct reliabilities (<i>a</i>), means, standard errors* (in parentheses):									
<i>Cosmopolitanism-COS</i> (7 items)	.862 5.58 (0.94)	.881 5.58 (0.05)	.871 5.64 (0.05)	.911 5.52 (0.05)	.800 5.68 (0.60)	.838 5.90 (0.07)	.912 5.71 (0.06)	.666 4.92 (0.08)	.756 5.52 (0.07)
<i>Identification with and Desire to Maintain Ethnic Culture-IDMC</i> (10 items)	.915 5.10 (1.11)	.924 5.30 (0.06)	.922 5.08 (0.06)	.920 4.56 (0.06)	.848 5.55 (0.07)	.912 5.30 (0.08)	.927 4.61 (0.07)	.807 4.90 (0.09)	.858 5.68 (0.08)
<i>Local Culture Language Use-LLANG</i> (7 items)	.950 6.21 (1.37)	.800 6.79 (0.05)	.701 6.84 (0.05)	.689 6.76 (0.05)	.842 6.67 (0.60)	.731 6.77 (0.07)	.933 3.70 (0.06)	.920 6.52 (0.05)	.909 5.31 (0.07)
<i>Local Culture Interpersonal Relationships-LINTERP</i> (4 items)	.806 5.73 (1.11)	.768 6.14 (0.06)	.708 5.90 (0.06)	.855 5.65 (0.06)	.723 5.99 (0.07)	.780 5.94 (0.07)	.841 4.66 (0.07)	.732 5.38 (0.09)	.651 5.87 (0.07)
<i>Ethnic Identity-EID</i> (3 factors)	- 5.68 (.089)	- 6.07 (0.60)	- 5.94 (0.59)	- 5.65 (0.76)	- 6.07 (0.58)	- 6.01 (0.64)	- 4.32 (0.46)	- 5.60 (0.68)	- 5.62 (0.80)
Correlations*, between									
COS-IDMC	.132a	-.050	.165a	-.002	.376a	.283a	.124a	.137	.198a
COS-LLANG	.023	-.038	.066	.044	.172a	.060	.050	.236a	.107
COS-LINTERP	.021	-.131b	-.050	-.092	.206a	-.031	.013	.257a	.211a
COS-EID	.076a	-.100	.096	-.040	.338a	.155b	.087	.274a	.219a

*Partial correlations (demographic covariates) for country samples on reduced item factors, Pearson bivariate correlations (std. deviations) for overall dataset. Country-sample means adjusted, controlling for demographics. a: $p < .01$, b: $p < .05$.

Table 2: Multi-Group Structural Equation Model Analyses

COS:	χ^2	df	χ/df	CFI	RMSEA	$\Delta\chi^2$	Δdf
1a. Unconstrained measurement	216.53*	112	1.933	.981	.022	-	-
<i>1b. Measurement weights constrained</i>	<i>309.36*</i>	<i>154</i>	<i>2.009</i>	<i>.972</i>	<i>.022</i>	<i>92.83*</i>	<i>42</i>
1b. Structural covariances constrained	372.30*	161	2.312	.962	.026	62.94*	7
EID:							
2a. Unconstrained measurement	2980.91*	1464	2.036	.922	.023	-	-
<i>2b. Measurement weights constrained</i>	<i>3467.00*</i>	<i>1590</i>	<i>2.181</i>	<i>.903</i>	<i>.024</i>	<i>486.09*</i>	<i>126</i>
2c. Structural covariances constrained	5080.83*	1632	3.113	.822	.032	1613.83*	42

* $p < .01$. Italics indicate interpreted models.

Table 3: Cluster Analyses

	Locals	Glocals	Marginals	Transnationals	Test Statistic
n (sample %)	659 (33)	909 (45)	151 (8)	296 (15)	
EID : Mean (SD)	6.00 (.44)	6.12 (.45)	4.33 (.76)	4.34 (.72)	F=1280.9, p<.001 ^a
COS : Mean (SD)	4.76 (.63)	6.22 (.44)	4.26 (.70)	6.13 (.54)	F=1315.1, p<.001 ^a
Sex : n (% within sex)					$\chi^2_{(3)}=22.42,$ p<.001
Males	350 (36)	386 (40)	85 (9)	146 (15)	
Females	309 (30)	523 (50)	66 (6)	150 (14)	
Age : n (% within age group)					$\chi^2_{(6)}=18.03,$ p=.006
0-24	368 (33)	473 (43)	99 (9)	173 (16)	
25-39	201 (31)	329 (51)	32 (5)	86 (13)	
40+	90 (35)	107 (42)	20 (8)	37 (15)	
Country : n (% within country):					$\chi^2_{(21)}=740.10,$ p<.001
Greece	123 (39)	165 (52)	5 (2)	24 (8)	
Hungary	114 (34)	188 (57)	11 (3)	19 (6)	
Sweden	116 (35)	141 (43)	24 (7)	48 (15)	
Mexico	72 (31)	139 (60)	10 (4)	10 (4)	
Chile	56 (29)	121 (63)	2 (1)	13 (7)	
Canada	18 (8)	29 (12)	49 (20)	145 (60)	
Korea	88 (64)	21 (15)	25 (18)	3 (2)	
India	72 (31)	105 (45)	25 (11)	34 (14)	

^aPost-hoc comparisons (Scheffe) revealed significant pairwise differences between all clusters on both constructs.

Table 4: Regression Analyses Summary*

<i>Behaviors</i>									
		European			Americas			Asian	
	All	Greece	Hungary	Sweden	Mexico	Chile	Canada	Korea	India
Local foods(R^2)	.22	.18	.18	.13	.12	.17	.31	\emptyset	.15
EID		.43a	.42a	.34a	.30a	.40a	.54a		.39a
COS	-.52a	.11b			-.15b		-.17a		
C*E	.66a								
R^2(Culture)	.19	.18	.17	.12	.10	.15	.31	\emptyset	.15
Sex	.05b		.15a		-.16b				
Age	-.08a								
Income-PPP	.12a			.11b					
Education	.06a					.14b			
Global foods(R^2)	.02	.03	.04	.05	\emptyset	.02	\emptyset	.13	.16
EID								-.36a	-.17a
COS	.10a					.14b			.20a
C*E				.20a				.26b	
R^2(Culture)	.01	\emptyset	\emptyset	.04	\emptyset	.02	\emptyset	.08	.06
Sex	.06a	.14a	.17a	.12b				-.21a	
Age	-.10a	-.14a	-.14a						-.18a
Income-PPP									
Education									-.18a
Tr. fashion(R^2)	.03	.07	.04	.07	.02	.03	.18	.11	.13
EID	.11a	.19a	.20a	.25a			.42a		.27a
COS									-.13b
C*E									
R^2(Culture)	.02	.05	.04	.06	\emptyset	\emptyset	.18	\emptyset	.08
Sex	-.10a	-.13b		-.11b	-.15b	-.17b			-.24a
Age								.33a	
Income-PPP	.09a								
Education		-.11b							
Gl. fashion(R^2)	.06	\emptyset	.07	.09	.10	.13	.03	.07	.09
EID									
COS	.13a							.26a	
C*E			.11b	.18a	.22a	.24a			
R^2(Culture)	.02	\emptyset	.01	.04	.04	.05	\emptyset	.07	\emptyset
Sex									.18a
Age	-.22a		-.22a	-.22a	-.25a	-.26a	-.18a		-.23a
Income-PPP			.14a			-.15b			
Education	.05b					.24a			
Pers. care(R^2)	.04	.02	\emptyset	.07	.22	\emptyset	.05	.10	.10
EID		.12b			.42a				.17a
COS									
C*E	.14a							.19b	
R^2(Culture)	.02	.02	\emptyset	\emptyset	.18	\emptyset	\emptyset	.05	.03
Sex	-.10a			-.15a					
Age	-.10a			-.20a	-.20a		-.17a		-.26a
Income-PPP							.14b	.22a	
Education					.21a				

Table 4 (Continued): Regression Analyses Summary*

<i>Behaviors</i>	European			Americas			Asian		
	All	Greece	Hungary	Sweden	Mexico	Chile	Canada	Korea	India
Appliances(R^2)	.05	.07	.08	.09	\emptyset	.12	.05	.13	.05
EID						.15b			
COS	.17a		.15a						.17a
C*E	-.12a			.22a					
R^2(Culture)	.02	\emptyset	.03	.05	\emptyset	.02	\emptyset	\emptyset	.03
Sex	-.14a	-.19a	-.16a					-.18b	-.15a
Age	.13a	.15a	.17a			.26a	.19a		
Income-PPP	.06a	.15a		.18a		.15b	.13b	.31a	
Education									
Electronics(R^2)	.07	.07	.04	.08	.03	\emptyset	.02	.08	.12
EID									
COS	.10a	.16a			.16a				.23a
C*E									
R^2(Culture)	.01	.02	\emptyset	\emptyset	.03	\emptyset	\emptyset	\emptyset	.05
Sex	.09a	.17a					.15b		
Age	-.22a	-.19a	-.20a	-.28a				-.17b	-.27a
Income-PPP	.08a							.21a	
Education	.05b								
Technology(R^2)	.11	.16	.07	.26	.11	.14	.10	.22	.04
EID			-.15a						
COS	.23a		.24a	.26a					
C*E	-.10a				.21a			.32a	
R^2(Culture)	.03	.03	.07	.11	.05	\emptyset	\emptyset	.13	\emptyset
Sex	.11a					.18a		.18a	
Age	-.27a	-.14a		-.37a	-.27a	-.37a	-.32a	-.22a	-.20a
Income-PPP				.16a					
Education	.19a	.41a		.22a	.21a	.24a			
Luxuries(R^2)	.08	.09	.08	.11	.16	.11	.11	.32	\emptyset
EID			-.20a		-.17a			-.43a	
COS		.11a							
C*E									
R^2(Culture)	\emptyset	.02	.03	\emptyset	\emptyset	\emptyset	\emptyset	.21	\emptyset
Sex	-.24a	-.19a	-.22a	-.31a	-.30a	-.30a	-.33a	-.35a	
Age						.16a			
Income-PPP	.14a	.20a		.14a	.26a				
Education	.06a								

* Gender (Female=0, Male=1). a:p<.01, b:p<.05. Wherever standardized beta coefficients appear, corresponding regression function F-tests were significant (p<.05). The first R^2 represents the overall variance in the dependent variable accounted for by all independent variables; the second denotes proportion for cultural variables.

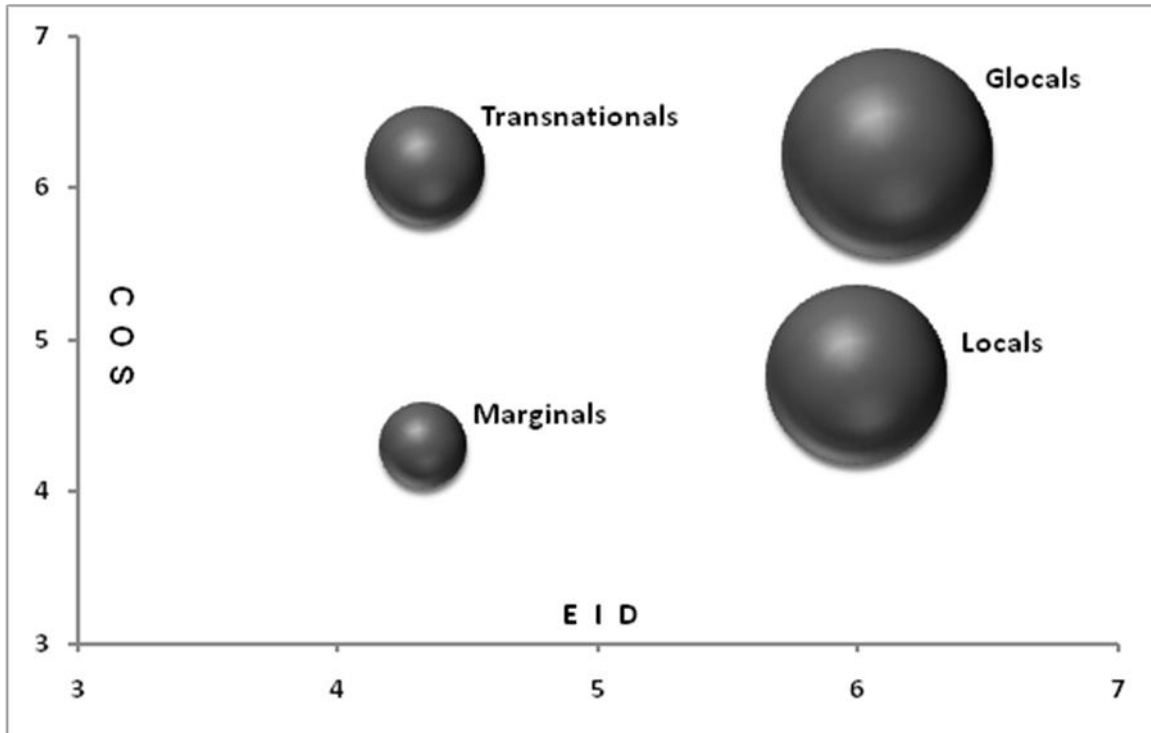
Table 5: Consistency of Behavioral Antecedents^a

<i>Between-Country Comparisons (9 product-categories)</i>							
Country	EID	COS	C*E	Sex	Age	Edu	Inc
Greece	2 (0n)	3 (0n)	∅	5 (3 F>M)	4 (3n)	2 (1n)	2 (0n)
Hungary	4 (2n)	3 (0n)	1 (0n)	4 (2 F>M)	4 (3n)	∅	1 (0n)
Sweden	2 (0n)	1 (0n)	3 (0n)	4 (3 F>M)	4 (4n)	1 (0n)	4 (0n)
Mexico	3 (1n)	2 (1n)	2 (0n)	3 (3 F>M)	3 (3n)	2 (0n)	1 (0n)
Chile	2 (0n)	1 (0n)	1 (0n)	3 (2 F>M)	4 (2n)	3 (0n)	2 (1n)
Canada	2 (0n)	1 (1n)	∅	2 (1 F>M)	4 (3n)	∅	2 (0n)
Korea	2 (2n)	1 (0n)	3 (0n)	4 (3 F>M)	3 (2n)	∅	3 (0n)
India	3 (1n)	5 (1n)	∅	3 (2 F>M)	5 (5n)	1 (1n)	∅
<i>Sum total</i>	<i>20 (6n)</i>	<i>17 (3n)</i>	<i>10 (0n)</i>	<i>28 (19 F>M)</i>	<i>31 (25n)</i>	<i>9 (2n)</i>	<i>15 (1n)</i>
<i>Between-Category Comparisons (8 countries)</i>							
Category, total #^b	EID	COS	C*E	Sex	Age	Edu	Inc
Local foods (14: 10p, 4d)	7 (0n)	3 (2n)	∅	2 (1 F>M)	∅	1 (0n)	1 (0n)
Global foods (14: 6p, 8d)	2 (2n)	2 (0n)	2 (0n)	4 (1 F>M)	3 (3n)	1 (1n)	∅
Trad. fashion (13: 6p, 7d)	5 (0n)	1 (1n)	∅	5 (5 F>M)	1 (0n)	1 (1n)	∅
Glob. fashion (16: 6p, 10d)	∅	1 (0n)	4 (0n)	1 (0 F>M)	6 (6n)	1 (0n)	2 (1n)
Personal care (12: 4p, 8d)	1 (0n)	2 (0n)	1 (0n)	1 (1 F>M)	4 (4n)	1 (0n)	2 (0n)
Appliances (17: 4p, 13d)	1 (0n)	2 (0n)	1 (0n)	4 (4 F>M)	4 (0n)	∅	5 (0n)
Electronics (11: 3p, 8d)	∅	3 (0n)	∅	2 (0 F>M)	5 (5n)	∅	1 (0n)
Technology (19: 5p, 14d)	1 (1n)	2 (0n)	2 (0n)	2 (0 F>M)	7 (7n)	4 (0n)	1 (0n)
Luxuries (15: 4p, 11d)	3 (3n)	1 (0n)	∅	7 (7 F>M)	1 (0n)	∅	3 (0n)

^aRegression results. #n=number of negative coefficient(s), F>M= denotes frequencies of females out-consuming males.

^bTotal #=number of significant (p≤.05) variables for that category, across 8 countries. p/d=#of significant psychographic/demographic variables; for each category across countries.

Figure 1: Cluster COS and EID Scores



Bubble size proportionate to cluster size

Appendix 1: Cultural Measures

COS:

1. I enjoy being with people from other countries to learn about their views and approaches.*
 2. I like to observe people of other cultures, to see what I can learn from them.*
 3. I find people from other cultures stimulating.*
 4. I enjoy exchanging ideas with people from other cultures or countries.*
 5. I am interested in learning more about people who live in other countries.*
 6. I like to learn about other ways of life.*
 7. Coming into contact with people of other cultures has greatly benefitted me.*
-

IDMC:

1. I consider it very important to maintain my (*ethnic*) culture.*
 2. I am very attached to all aspects of the (*ethnic*) culture.*
 3. I feel very proud to identify with the (*ethnic*) culture.*
 4. It is very important for me to remain close to the (*ethnic*) culture.*
 5. Although I believe that I might acquire some elements of another culture(s), it is important for me to hold on to my (*ethnic*) culture.*
 6. I believe that it is very important for children to learn the values of (*ethnic*) culture.*
 7. I feel very much a part of the (*ethnic*) culture.*
 8. The acquisition of (*ethnic*) family values is desirable.
 9. The (*ethnic*) culture has the most positive impact on my life.*
 10. If I was to live elsewhere, I would still want to retain my (*ethnic*) culture.*
 11. Participating in (*ethnic*) holidays and events is very important to me.*
-

LLANG:

1. In general, I speak in the (*ethnic*) language.*
 2. I mostly carry on conversations in (*ethnic*) language everyday.*
 3. I always use the (*ethnic*) language with my friends.*
 4. I always speak (*ethnic*) with other family members.*
 5. I mostly speak in (*ethnic*) at family gatherings.*
 6. I speak (*ethnic*) regularly.*
 7. I always speak/spoke (*ethnic*) with my parents.
 8. I feel very comfortable speaking in (*ethnic*).*
 9. Many of the books that I read are in (*ethnic*).
-

LMEDIA:

1. The magazines/books that I read are always in (*ethnic*).
 2. The newspapers that I read are always in (*ethnic*).
 3. The radio programs that I listen to are always in (*ethnic*).
 4. The Internet sites that I visit are always in the (*ethnic*) language.
-

LINTERP:

1. Most of the people that I go to parties or social events with are also (*ethnic*).*
 2. I get together with other (*ethnic*) very often.*
 3. Most of my friends are (*ethnic*).*
 4. Most of the people at the places I go to have fun and relax are also (*ethnic*).*
 5. I have many (*ethnic*) friends with whom I am very close.
-

*Retained in SEM multigroup analyses.

“Ethnic”: (Korean/Koreans, Swedish/Swedes, etc.).

Appendix 2: SEM Baseline Measurement Models

Latent Construct	Overall	Greece	Hungary	Sweden	Mexico	Chile	Canada	Korea	India
<i>COS (7 items)</i>									
$\chi^2/df=$	5.166	1.603	3.167	1.339	2.390	1.835	1.584	1.988	1.556
CFI=	.989	.991	.969	.996	.949	.973	.992	.874	.977
RMSEA=	.045	.044	.081	.032	.078	.066	.049	.085	.049
<i>EID-IDMC (10 items)</i>									
<i>EID-LLANG (7 items)</i>									
<i>EID-LINTERP (4 items)</i>									
$\chi^2/df=$	5.797	2.411	1.882	2.424	2.225	1.507	1.643	2.024	2.144
CFI=	.969	.923	.939	.918	.879	.941	.966	.848	.903
RMSEA=	.049	.067	.052	.066	.073	.052	.052	.087	.070