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German Consumer Decision-Making Styles

The lack of previous relevant consumer research in Germany, together with the need to test the generalizability of consumer decision-making styles in different countries and with non-student samples, prompted an investigation of German shoppers. The original U.S. eight-factor model could not be confirmed completely, but support was found for six factors: *Brand Consciousness, Perfectionism, Recreational/Hedonism, Confused by Overchoice, Impulsiveness, and Novelty-Fashion Consciousness*. *Variety Seeking* was novel to Germany and replaced brand loyalty and price-value consciousness factors found in previous countries. Explanations for the differences are discussed as well as the marketing implications.

The advent of global markets has resulted in a plethora of product choice, retail channels (e.g., mail catalogues, television, Internet, and stores) and promotional activity, which make consumers' decision making increasingly complex. In the extant consumer behavior literature, most studies assume that all consumers approach shopping with certain decision-making traits that combine to form a consumer's decision-making style. Some of these traits, such as brand/store loyalty (Moschis 1976), quality consciousness (Darden and Ashton 1974) or value consciousness (McDonald 1993), have been identified by other authors, but a more comprehensive instrument that measures these and other traits is provided by Sproles and Kendall's (1986) Consumer Styles Inventory (CSI). This instrument measures eight mental characteristics of consumer's decision making: Perfectionism, Brand Consciousness, Novelty-Fashion Consciousness, Recreational, Price-Value Consciousness, Impulsiveness, Confused by Overchoice, and Brand-Loyal/Habitual. Sproles (1985) defines consumer decision-making styles as "a pat-

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terned, mental, cognitive orientation towards shopping and purchasing, which constantly dominates the consumer's choices resulting in a relatively-enduring consumer personality" (79).¹ Although some concerns about the generalizability of the inventory have been expressed, the CSI represents the most-tested instrument currently available to assist marketers in examining cross-cultural decision-making styles. Marketers intending to enter or to expand into new overseas markets are more likely to succeed if they gain a good understanding of different cultures. With such knowledge, retailers can differentiate and target their offerings, locations, and promotional efforts according to the varying patronage responses of the basic shopper types. From an international marketing point of view, a single instrument to measure decision-making styles that is applicable to many different countries would be desirable because such an instrument could be used to identify similarities and differences in consumer decision making between countries and could enhance comparability. To date, however, there is no single accepted decision-making typology (Mitchell and Bates 1998). There is evidence that decision-making styles can vary across cultures (Sproles and Kendall 1986; Hafstrom, Chae, and Chung 1992; Durvasula, Lysonski, and Andrews 1993; Lysonski, Durvasula, and Zotos 1996; Mitchell and Bates 1998; Fan and Xiao 1998), but it is not known how they vary across all cultures, not even those markets that can represent major export opportunities. Thus far, the CSI has been applied to seven countries: the U.S., Korea, New Zealand, Greece, India, the United Kingdom, and China. However, Rosenthal and Rosnow (1984) suggest that a study needs to be replicated at least fifteen times before results can be generalized, indicating that additional work on the CSI is necessary.

Unfortunately, one major issue with Sproles and Kendall's CSI (1986) relates to its generalizability, as the original study used U.S. high school students to establish the reliability and validity of the instrument. The original authors acknowledged that their results could not be generalized to all consumers, particularly to adults, as student samples are not representative of the general population (Gordon et al. 1986), nor can they be generalized in a cross-cultural context as the results are not representative of their respective cultures (Samiee and Jeong 1994). Despite these limitations, most subsequent studies have continued to use students from the following countries: Korea (Hafstrom, Chae, and Chung 1992), New Zealand (Durvasula, Lysonski, and Andrews 1993), New Zealand, Greece, U.S., India (Lysonski, Durvasula, and Zotos 1996), the United Kingdom (Mitchell and Bates 1998), and China (Fan and Xiao 1998). In

one study of thirty-two papers using student samples, 73 percent of the studies had at least one significant difference between the results of students and nonstudents (Gordon, Slade, and Schmitt 1986). Other problems of nonrepresentativeness, variance, and little external validity are also evident. For example, in one study on brand confusion that employed a student sample, "an effort was made to include product categories frequently used by a student population" (Loken, Ross, and Hinkle 1986, 198). Students also can be considered to be better educated, more intelligent, more sophisticated, less experienced with many kinds of products, have less purchasing power than *average* consumers,² and are more prone to reference group influence compared to housewives (Park and Lessig 1977). The limited purchasing power of students means that incentives can have a greater effect on their attitudes and behavior and can further remove them from other samples. Some studies have motivated students through incentives, for example, extra credits for their course work (e.g., Loken, Ross, and Hinkle 1986; Pechman 1996), gifts (e.g., Ha 1996), or money (e.g., Jacoby, Speller, and Kohn 1974; Moorman 1990; Keller and Staelin 1987; Grether and Wilde 1983). Incentives create a situation in which the respondents pay more than average attention and are very motivated to do well. Moreover, students are trained in learning, memorizing, and solving complex problems (Lussier and Olshavsky 1979), making them generally more capable of resolving problems than average consumers. Students also differ along perceptual variables (Arndt 1971) and in respect to sociopsychological variables, such as social responsibility, cosmopolitanism, alienation, and status consciousness. Such differences might affect purchase preferences and decision-making styles (Lysonski, Durvasula, and Zotos 1996). Thus, the CSI urgently requires testing on nonstudent samples if it is to be more widely used on consumers across the globe.

The literature suggests that the cross-cultural generalizability of the CSI is limited, indicating that it needs to be tested and confirmed before being used by consumer interest groups or marketers in other countries. If it is not confirmed, it may be necessary to propose a different CSI model that represents other countries' consumer decision-making styles more adequately. The objectives of this study were (1) to test the CSI's reliability and validity in Germany, (2) to identify decision-making styles of German consumers, and (3) to compare their decision-making styles with those of consumers from other countries (see *METHODOLOGY* for country selection rationale).

METHODOLOGY

Choice of Country

Evidence suggests that the CSI is more applicable to developed countries (Lysonski, Durvasula, and Zotos 1996), yet despite the European Union (EU) being the largest market in the world and marketing in Europe becoming more complex and challenging over the last three decades (Lynch 1993), the CSI has been applied to only one western European country so far, the United Kingdom. Although Germany is the largest country within the EU, with more than eighty million inhabitants and one of the highest Gross Domestic Products (GDP) per capita in the world (The Economist Pocket World in Figures 1998), no study has focused on it. Indeed, there is a striking paucity of international marketing research focusing on Germany.³ It is likely that German consumer decision-making styles will vary because Germany has some of the strictest consumer protection laws in the world. The Center for the Combating of Unfair Competition enforces a number of restrictions that one would not expect in such an advanced country. For example, comparative advertising (even if truthful), is forbidden to a large extent as German authorities think it could lead to competitors disparaging each other. Also, most sales promotion tools are strictly regulated and labeling anything as *free* is banned under German discount law.

The Questionnaire

A German version of the questionnaire was developed by translating the forty items of the original CSI (Sproles and Kendall 1986) into German. The terminology was adapted to suit German shoppers, bearing in mind the connotations of the terms known to exist in the original (American) version. When translating items, it is more important to achieve an equivalence of meaning than a direct translation (Nasif et al. 1991), and, in order to achieve comparability, back translation was conducted (Sekaran 1983). Problems emerged during the translation because some items did not appear to be grounded in the language of an average German consumer. These items were rephrased without altering their meaning. For example, the word *confused* in the German questionnaire was replaced by *durcheinander* (mixed up), which is a more neutral word because *confusion* (German: *Konfusion, Verwirrtheit, Verwirrung*) has unfavorable connotations in Germany.

The questionnaire was face validated twice using exploratory interviews (Malhotra, Argawal, and Peterson 1996; Churchill 1991). The first pretest with a small sample ($n = 11$) of people revealed that respondents were reluctant (some even annoyed) to answer item thirteen ("I prefer buying the best selling brands"). Respondents felt unable to know which brands sell best because only in very few product categories (e.g., compact discs, videos) do consumers know which products sell best through chart ratings. Most objections were raised against item twelve ("Nice department and specialty stores offer me the best products") when respondents stressed that they prefer sales personnel to be competent rather than overly obliging.

A second pretest of twenty-one shoppers interviewed outside a supermarket was conducted to ensure that the respondents attributed the same meaning to each question. The German questionnaire included thirty-eight of the forty Sproles and Kendall (1986) items which were rated on a five-point agree/disagree scale. To counterbalance possible order effects, the items were rotated, resulting in two different orders of questions.

The Sample

A common sampling problem in both single-country and cross-cultural research is that it is "unclear which subjects represent a nation's [culture's] central tendencies" (Nasif et al. 1991, 84). For practical reasons, cross-cultural studies deal with samples that almost always represent only one segment within cultures of interest (e.g., students or housewives). Some researchers contend that students are not representative of the general population (Gordon, Slade, and Schmitt 1986) and that results derived from experiments with student samples are not generalizable (Kinnear and Taylor 1983). Moreover, Samiee and Jeong (1994) argue that in cross-cultural research, subgroups, such as students, are not representative of their respective cultures. Despite these problems, previous reputation studies have used students and ignored Sproles and Kendall's demand for an administration of the CSI to the general public.

Accordingly, the sample used in this study was of the shopping public. A sample of male and female shoppers (eighteen and older)⁴ was drawn from those entering or leaving a shop in Lüneburg (Lower Saxony) and Hamburg during July and August 1998. The interviews were carried out from Monday to Saturday by two people at two different locations: one in front of a department store in the city center of Hamburg and the other outside (but on the premises of) a supermarket in Lüneburg. Both the

department store and supermarket were typical in size and location of most other German cities. The interviews were conducted within a seven-day and seventeen-day period, respectively. Because of the higher rate of shop visits, the interviews-per-day ratio was about twice as high for the Hamburg-based interviews.

As the spread of opinions in the population was not known, exact sample calculations using formulas was not possible. Instead, a rule of thumb that the minimum sample size should be ten times the number of items measured; that is, $n = 400$ was used (Hair et al. 1995, 373). With the exception of Mitchell and Bates (1998), this guideline has been breached regularly by the majority of studies which have replicated Sproles and Kendall's (1986) research (e.g., Hafstrom, Chae, and Chung (1992) used 310; Durvasula, Lysonski, and Andrews (1993) used 210; and Lysonski, Durvasula, and Zotos (1996) used 95, 73, 108, and 210 students in four different countries).

A total of 455 interviews were conducted: 184 in Hamburg and 271 in Lüneburg.⁵ The interviews were conducted only in urban areas because this is where most retail and consumption activities take place and the higher rate of shop visits meant the data collection could be carried out more efficiently. There is also evidence that German rural and urban consumers are very similar (Schopphoven 1991). Table 1 provides a description of the sample characteristics compared to the general population. Females were slightly overrepresented, perhaps because Germany has a higher percentage of men who work. Also overrepresented were respondents aged eighteen to thirty-one and thirty-two to forty-four as well as those who were more educated. The higher percentage of younger and more educated consumers in the sample may be attributed to the fact that the majority of interviews were conducted in Lüneburg, a city with two colleges and a relatively large student and educated population.

Analysis

Confirmatory factor analysis (Kelloway 1998; Long 1983) was performed to test the appropriateness of the original factor structure produced by Sproles and Kendall. The items were attributed to the respective factors according to the exploratory factor loadings found by Sproles and Kendall. The confirmatory factor analysis was then performed with Jöreskog and Sörbom's LISREL program, version 8.12. The maximum likelihood technique was used as an estimator due to its general superiority to other estimation procedures (Kelloway 1998, 17-19). The results of

Table 1
A Comparison of the Sample's and Germany's Demographic Profile

| | Sample's Demographic Profile | Germany's Demographic Profile |
|-------------------|---------------------------------|----------------------------------|
| Age | | |
| 18-31 | 34% | 20% |
| 32-44 | 31% | 18% |
| 45-57 | 15% | 17% |
| 58+ | 20% | 23% |
| Gender | | |
| Male | 44% | 49% |
| Female | 56% | 51% |
| Education* | | |
| More Educated | 46% | 25% |
| Less Educated | 54% | 75% |

*Subjects with *only* a basic education (i.e., those who completed lower or intermediate secondary school) formed the group of *less educated* consumers, while those with a higher education (i.e., A-levels [German *Abitur*] and/or university degree) formed the group of *more educated* consumers. Respondents with *Abitur* were considered more educated as they have spent thirteen years at school (as opposed to people who went to lower or intermediate secondary school and only have completed nine and ten years, respectively).

the confirmatory factor analysis showed that no identification of the original model could be achieved even when only the three highest-loading items were considered for each factor. As model identification is a necessary condition for model fit and interpretation, this result *clearly disconfirms* the adequacy of the factor structure suggested by Sproles and Kendall for the present data. In fact, a model could only be computed when the factor with the weakest reliability ($\alpha = .48$), Price-Value Consciousness, was omitted. However, despite the global goodness-of-fit indices being acceptable, the local fit indices indicated that this reduced model also had to be rejected as six out of twenty-one items had coefficients of determination below the threshold of 0.4, and, more importantly, only four out of seven factors passed the critical 0.5 value for the average variance explained, which is considered a prerequisite of adequate factor measurement (Homburg and Baumgartner 1995). Table 2 lists global and local fit indices of the reduced original model

Following the disconfirmation of Sproles and Kendall's original model structure, an exploratory factor analysis was performed to develop a model of consumer decision-making styles that fits the German data better. Consistent with Sproles and Kendall (1986), principal components analysis with varimax rotation was used. Because principal components

Table 2
Global and Local Fit Indices of a Reduced Original Sproles and Kendall Model

| <i>Global Goodness of Fit</i> ⁹ | | |
|--|--|---|
| GFI | 0.826 | |
| AGFI | 0.761 | |
| RMR | 0.079 | |
| RMSEA | 0.110 | |
| CFI | 0.753 | |
| <i>Local Goodness of Fit</i> | Coefficients of Determination for Included Items | Average Variance Explained for Included Factors |
| Perfectionism | 0.490; 0.645; 0.615 | 0.583 |
| Brand Consciousness | 0.644; 0.810; 0.675 | 0.709 |
| Novelty-Fashion Consciousness | 0.771; 0.784; 0.355 | 0.577 |
| Recreational/Hedonism | 0.521; 0.760; 0.145 | 0.475 |
| Impulsiveness | 0.481; 0.373; 0.696 | 0.516 |
| Confused by Overchoice | 0.280; 0.440; 0.754 | 0.491 |
| Brand-Loyal/Habitual | 0.163; 0.121; 0.573 | 0.286 |
| | Coefficients of determination < 0.4 in italics | Average variance explained < 0.5 in italics |

analysis does not produce a single solution but leaves the decision about the *right* number of factors largely to researchers, four alternative solutions were considered, with eight, seven, six, and five factors, respectively.⁶ This procedure is consistent with a previous study by Fan and Xiao (1998). All solutions except the five-factor solution accounted for a higher degree of variation in comparison to the 46 percent reported by Sproles and Kendall (1986). Table 3 lists the reliability scores using Cronbach's alpha for each of the four alternative models.

To assess which of the four factor models fit the German data most appropriately, confirmatory factor analysis was performed for each model. Model identification was achieved for the eight-, seven-, and five-factor solutions, which indicates that all three models represent the German data better than the original structure by Sproles and Kendall. This was not the case for the six-factor model where identification was not possible. A comparison of the goodness of fit of the three remaining models reveals that the seven-factor solution fits the data best (see Table 4). Although the global fit indices do not differ significantly between the three models and are quite similar to the reduced original model, the overall superiority of the seven-factor model becomes apparent when looking at the local indices where only three out of twenty-one items have a coef-

Table 3
Cronbach's Alpha Reliability for Exploratory Eight-, Seven-, Six- and Five-Factor Solution

| | 8-Factor Model | 7-Factor Model | 6-Factor Model | 5-Factor Model |
|--|----------------|----------------|----------------|----------------|
| <i>Explained Variance</i> | 55.1% | 51.9% | 47.7% | 43.1% |
| <i>Eigenvalue of Last Extracted Factor</i> | 1.28 | 1.58 | 1.74 | 2.01 |
| Perfectionism | .77 | .75 | .75 | .69 |
| Brand Consciousness | .48 | .73 | .78 | .82 |
| Novelty-Fashion Consciousness | .71 | .71 | .69 | .65 |
| Recreational/Hedonism | .42 | .65 | | |
| Price-Value Consciousness | | | | |
| Impulsiveness | .61 | .70 | .71 | .70 |
| Confused by Overchoice | .76 | .75 | .76 | .76 |
| Factor 8 | .31 | | | |
| Factor 9 | .46 | .53 | .53 | |

ficient of determination less than 0.4, and all factors except one (i.e., Variety Seeking) pass the critical 0.5 value for the average variance explained.

Taking the results of the exploratory and confirmatory analysis into account, it can be concluded that the seven-factor solution proves to be superior to all other solutions and, at the same time, explains a higher amount of the data than Sproles and Kendall's original factor structure. Table 5 lists detailed information on the seven-factor solution, including eigenvalues and average variance explained for each of the seven factors, factor loadings, coefficients of determinations, and mean values for each item considered.

The reliability of the seven-factor structure over time was assessed using test-retest reliability and internal consistency reliability. Because no item in the questionnaire was aimed at capturing a respondent's initial reaction, the authors opted for test-retest reliability. Test-retest reliabilities were calculated between the first and second administration of the questionnaire for forty-two respondents from the original sample (9.2%) who agreed to answer the questionnaire a second time. Shoppers who were interviewed in the first week of the sampling procedure were asked to participate in the test-retest, which took place two weeks after they had been interviewed. Two weeks was considered a sufficient time interval between the first and second administration as reliability tends to decrease as more time elapses between two testings (Malhotra 1996). Questionnaires and prepaid envelopes were picked up by respondents at

Table 4
Global and Local Fit Indices of Three Alternative German-Specific Factor Models

| | 8-Factor Model | 7-Factor Model | 5-Factor Model |
|--|---|---|---|
| <i>Global Goodness of Fit</i> | | | |
| GFI | 0.808 | 0.826 | 0.830 |
| AGFI | 0.742 | 0.761 | 0.772 |
| RMR | 0.084 | 0.079 | 0.083 |
| RMSEA | 0.113 | 0.112 | 0.114 |
| CFI | 0.730 | 0.778 | 0.761 |
| <i>Local Goodness of Fit</i> | | | |
| Coefficients of Determination (COD) for Included Items | 6 out of 24 items with COD < 0.4 | 3 out of 21 items with COD < 0.4 | 7 out of 19 items with COD < 0.4 |
| Average Variances Explained (AVE) for Included Factors | 2 factors with AVE < 0.5 (Factor 8 = 0.35; Factor 9 = 0.48) | 1 factor with AVE < 0.5 (Factor 9 = 0.48) | 2 factors with AVE < 0.5 (Perfectionism = 0.48; Novelty-Fashion Seeking = 0.36) |

the location of the interview. The correlations showed a high degree of correspondence with 74 percent of items having correlations of 0.60 and higher. The test-retest reliabilities on the thirty-eight items averaged 0.71. This result compares favorably with Sproles' (1985) assessment on fourteen items that averaged only 0.5.

Taking 0.60 or better as desirable for any measurement scale (Robinson, Shaver, and Wrightsman 1991), the scales representing the factors Brand Consciousness, Perfectionism, Recreational, Confused by Overchoice, Impulsiveness, and Novelty-Fashion Consciousness are stable and internally consistent in the sample (see Table 6). The alpha for the factor that was labeled Variety Seeking was moderate, perhaps suggesting that the questionnaire items are not measuring this factor effectively. The alphas reported here are higher than in previous studies, which reported less satisfactory reliabilities for most factors (see Table 6).

FINDINGS

In the German sample, more than a dozen out of thirty-eight items loaded on factors other than those found for the U.S. sample. The seven factors discussed below are labeled in line with those of Sproles and Kendall (1986) when they reflect similar decision-making styles of German consumers. The order of factors is based on the amount of variance explained.

Table 5
Factors Found in German Consumer Decision-Making Styles

| Items | Factor Loading (for Principal Components Analysis) | Coefficient of Determination (from Confirmatory Factor Analysis) | Mean Item Value |
|--|---|---|--------------------|
| Factor 1: Brand Consciousness | 5.44 | 0.71 | |
| | <i>(Eigenvalue)</i> | <i>(Average Variance Explained)</i> | |
| The more expensive brands are usually my choice. | 0.71 | 0.79 | 2.26 |
| The well-known national brands are best for me. | 0.70 | 0.65 | 2.44 |
| The higher the price of the product, the better the quality. | 0.69 | 0.69 | 2.20 |
| I look carefully to find the best value for the money. | -0.50 | n.c. | 1.95 |
| Nice department and specialty stores offer me the best products. | 0.45 | n.c. | 2.98 |
| The most advertised brands are usually very good choices. | 0.43 | n.c. | 2.52 |
| A product doesn't have to be perfect, or the best, to satisfy me. | -0.41 | n.c. | 2.83 |
| Factor 2: Perfectionism | 3.48 | 0.53 | |
| In general, I usually try to buy the best overall quality. | 0.78 | 0.67 | 4.04 |
| When it comes to purchasing products, I try to get the best or perfect choice. | 0.77 | 0.58 | 3.67 |
| Getting good quality is very important to me. | 0.67 | 0.47 | 4.28 |
| My standards and expectations for products I buy are very high. | 0.60 | 0.41 | 3.74 |
| I make a special effort to choose the very best quality products. | 0.56 | n.c. | 2.2 |
| Factor 3: Recreational/Hedonism | 3.11 | 0.66 | |
| Shopping is not a pleasant activity to me. | -0.70 | 0.47 | 3.32 |
| Going shopping is one of the enjoyable activities of my life. | 0.67 | 0.85 | 2.78 |
| I make my shopping trips fast. | -0.55 | n.c. | 2.57 |
| Shopping in many stores wastes my time. | -0.51 | n.c. | 3.51 |
| It's fun to buy something new and exciting. | 0.47 | n.c. | 3.31 |
| I shop quickly, buying the first product or brand I find that seems good enough. | -0.44 | n.c. | 3.37 |
| I really don't give my purchases much thought or care. | -0.44 | n.c. | 3.60 |
| To get variety, I shop in different stores and choose different brands. | 0.42 | n.c. | 3.58 |
| Factor 4: Confused by Overchoice | 2.34 | 0.57 | |
| The more I learn about products, the harder it seems to choose the best. | 0.74 | 0.70 | 2.86 |
| All the information I get on different products confuses me. | 0.71 | 0.59 | 2.33 |
| Sometimes it's hard to choose which stores to shop. | 0.71 | 0.43 | 2.65 |
| There are so many brands to choose from that I often feel confused. | 0.59 | 0.32 | 2.62 |

Table 5 (continued)

| Items | Factor Loading (for Principal Components Analysis) | Coefficient of Determination (from Confirmatory Factor Analysis) | Mean Item Value |
|---|---|---|--------------------|
| Factor 5: Impulsiveness | <i>2.01</i> | <i>0.52</i> | |
| Often I make careless purchases I later wish I had not. | 0.72 | 0.67 | 2.33 |
| I am impulsive when purchasing. | 0.71 | 0.38 | 2.77 |
| I should plan my shopping more carefully than I do. | 0.67 | 0.50 | 2.64 |
| I carefully watch how much I spend. | -0.60 | n.c. | 2.46 |
| I take the time to shop carefully for the best buys. | -0.53 | n.c. | 2.77 |
| Factor 6: Novelty-Fashion Consciousness | <i>1.74</i> | <i>0.58</i> | |
| I keep my wardrobe up-to-date with the changing fashions. | 0.84 | 0.77 | 2.61 |
| Fashionable, attractive styling is very important to me. | 0.69 | 0.36 | 3.32 |
| I usually have one or more outfits of the very newest style. | 0.68 | 0.61 | 2.47 |
| I enjoy shopping just for the fun of it. | 0.40 | n.c. | 2.29 |
| Factor 7: Variety Seeking | <i>1.58</i> | <i>0.48</i> | |
| I change brands I buy regularly. | 0.70 | n.c. | 2.59 |
| Once I find a product or brand I like, I stick with it. | -0.54 | n.c. | 3.31 |
| It's fun to buy something new and exciting. | 0.49 | 0.53 | 3.69 |
| To get variety, I shop in different stores and choose different brands. | 0.45 | 0.43 | 3.58 |
| Nice department and speciality stores offer me the best products. | -0.44 | n.c. | 2.98 |

n.c. = not considered in the analysis

Factor 1: Brand Consciousness. The highest loading item on this factor is, "The more expensive brands are usually my choice," which measures German consumers' orientation toward purchasing well-known, more expensive brands. Consumers scoring highly on this factor appear to equate higher prices with better quality. This factor contains an item that previously loaded onto the 'Price-Value Consciousness' factor, which was not found in this study.

Factor 2: Perfectionism. The highest loading item on this factor is, "In general, I usually try to buy the best overall quality." German consumers who score highly on this factor seek to maximize quality and to get the best choice.

Factor 3: Recreational/Hedonism. The highest loading item (-.70) on this factor is, "Shopping is not a pleasant activity to me." High scorers on this factor enjoy shopping; in fact, they find it entertaining. Two items

loaded onto this factor that in Sproles and Kendall's (1986) study loaded onto the factors Perfectionism and Price-Value Consciousness.

Factor 4: Confused by Overchoice. High scorers on this characteristic perceive the plethora of stores, products, and product-related information available to be confusing. It appears that some German consumers are equally indecisive about the stores to shop in as with the number of available brands because 28 percent of respondents agreed with the statement, "Sometimes it's hard to choose which stores to shop," and 28 percent agreed with the statement, "There are so many brands to choose from that I often feel confused." These consumers are likely to experience information overload and, as a consequence, may be less able to make optimal choices.

Factor 5: Impulsiveness. All the items that loaded onto this factor in Sproles and Kendall's (1986) study were found to load on the same factor in the present study, indicating that it is not affected by cultural differences. The highest loading item on this factor is, "Often I make careless purchases I later wish I had not." High scorers on this characteristic do not plan their shopping.

Factor 6: Novelty-Fashion Consciousness. The highest loading item on this factor is "I keep my wardrobe up-to-date with the changing fashions." High scorers on this factor are fashion conscious, keep up-to-date with styles, and, to some extent, gain pleasure from going shopping.

Factor 7: Variety Seeking. A variety-seeking trait has not previously been identified using the CSI (see Table 6). This factor contains an item that previously loaded onto the Novelty-Fashion Consciousness factor and two items that previously loaded onto the Brand-Loyal/Habitual factor. High scorers on this factor are likely to switch brands, even if their current brands satisfy their needs. They may also switch brands to experience better alternatives or to increase stimulation by bringing something new into their lives.

DISCUSSION

For comparison purposes, Table 6 shows the consumer decision-making characteristics identified in this and other studies. With the exception of the Chinese study (Fan and Xiao 1998),⁷ the factors found in the other countries are labeled in line with those of Sproles and Kendall (1986). Six out of eight factors found by Sproles and Kendall (1986) are confirmed in the German data, although with several different items and loadings. A comparison of the present study with Sproles and Kendall's

(1986) results reveals that the majority of factor loadings were higher in the present study, indicating that in Germany the items better explain the factors they load onto.

A Price-Value Consciousness trait was not confirmed in the present study of the general public and was not found in student samples in New Zealand, Greece, U.S., and India (Lysonski, Durvasula, and Zotos 1996). In the Sproles and Kendall (1986) study, high scorers on the factor Price-Value Consciousness were characterized as individuals who "look for sale prices and appear conscious of lower price in general" (273). The nonconfirmation of this factor in Germany indicates that price does not play a decisive role in German decision making. This is not likely to be because German consumers are so wealthy that they are price insensitive, but may be because they are more preoccupied with other product attributes such as quality (Anders 1991). In a nation-wide survey of German values and lifestyles, 81 percent of respondents agreed that quality is of utmost importance to them when purchasing goods (Dialogue 4-Gesellschaft, Wirtschaft, Konsumenten 1995, 460).

The fact that an item ("I look carefully to find the best value for money") loaded on the Brand Consciousness factor in this study may indicate that German consumers link brand consciousness and price consciousness in some way. For instance, it is conceivable that the brand-conscious consumer is relatively indifferent to price. An alternative explanation might be the differences in the retail environment. Germany has a long tradition of the discount format (e.g., Aldi, Lidl) and, in general, German consumers feel more at ease shopping at discounters than, for example, their U.K. counterparts (Kingston 1998). Because shopping at discounters has become a normal part of everyday life in Germany and the quality of products sold in German discounter outlets tends to be good, German consumers may feel they cannot buy any cheaper than at discount stores, which makes searching for the best value for money less necessary. An equally likely explanation for the nonconfirmation of the Price-Value Consciousness factor may be due to the different sample of shoppers used for this study. Sproles and Kendall (1986) used a student sample, who are likely to be on restricted incomes and, hence, more likely to be conscious of lower prices.

Interestingly, the factor Confused by Overchoice was found in every country thus far investigated, indicating the cross-cultural generalizability of this trait. Although not labeled as such, this factor was also found in the Chinese study (Fan and Xiao 1998), where it was part of a factor labeled Information Utilization. The items loading onto the Con-

fused by Overchoice trait in this study are the same as in that of Sproles and Kendall (1986), suggesting that this factor may be stable across populations. This observation is all the more striking when taking into account how diverse the investigated countries are in terms of economic and market development and culture. For example, in some stores in India, consumers are not allowed to walk freely inside and to examine and compare labels of different brands before making a choice (Lysonski, Durvasula, and Zotos 1996). India's consumers are also exposed to less commercial information,⁸ yet they suffer from overchoice like consumers from more advanced countries (e.g., U.K., U.S.). In Germany, the confusion may be exacerbated because of German consumers' preference for detailed information, which is consistent with Germany's low-context orientation.⁹ It is argued that low-context consumers feel uncomfortable with limited data as they associate it with vagueness and ambiguity (Samovar and Porter 1995). Germans often expect a great deal of information, and German advertisements place great emphasis on facts rather than entertainment (in contrast to France, for example). Hall and Hall (1990) note, "German ads are loaded with detailed information; products are described and analyzed. Often, even in the national media, ads tell precisely where the product can be bought and at what price" (71).

A Time Consciousness (Fan and Xiao 1998) or Time-Energy Conserving trait, as identified by Hafstrom et al. (1992) and subsequently in Mitchell and Bates' (1998) eight- and ten-factor models, was not found in the present study. This could be due to recent changes in opening times. German consumers no longer need to economize their shopping time after a liberalization of the German law concerning shop opening hours (*Ladenschlussgesetz*) took place in 1996. On workdays, shops can now stay open until 8 p.m. (previously 6:30 p.m.) and on Saturdays until 4 p.m. (previously 2 p.m.). Nevertheless, Germans like using time effectively (Hall and Hall 1990). German consumers' dislike of wasting time shows in their fondness for familiar routines (Boote 1982/83), which, in turn, is reflected in Germany's low rate of job mobility in comparison to most other developed countries, such as the U.S., Sweden, and the Netherlands (DiPrete et al. 1997; Carroll and Mayer 1986). It is likely that in a CSI developed in Germany, a Time Consciousness factor would emerge. In the exploratory eight-factor solution, the final factor contains some information that might be interpreted as support for this assumption.

The Variety Seeking factor has not been found in any other countries (i.e., U.S., Korea, U.K., New Zealand, Greece, India, China; see Table 6).

This may indicate either a genuine cultural difference in shoppers' attitudes among Germany and other countries or reflect the different samples. All previous samples consisted of students who are more likely to be under financial constraints than mature German consumers. Sufficient discretionary income seems a necessary prerequisite for variety seeking, which can (a) involve financial risk (e.g., when little is known about a new product) and (b) mean buying new products more regularly for excitement reasons and not to meet basic needs. One factor that could explain the Variety Seeking trait is the fact that Germany has a relatively small retail density, characterised by a high degree of concentration and a trend toward fewer but larger outlets (Howe, Jürgens, and Werwy 1998). The five largest chains of grocery retailers account for more than 65 percent of the retail volume (compared to 15% in the U.S.) (Bartlett and Goshal 1992), and currently, the number of food retail outlets is shrinking at the rate of approximately 2,000 stores per year (Grunert et al. 1995). In such circumstances, German consumers could feel bored and satiated (Venkatesan 1973) more easily as they perceive retailers' assortments as increasingly alike, which, in turn, could cause them to seek stimulation through variety seeking.

Overall, the fact that some factors could not be confirmed, for example, Price-Value Consciousness and Brand-Loyal/Habitual, and the finding of a new Variety Seeking factor suggests that the original factor model is not a particularly good fit for German decision-making styles.

IMPLICATIONS

It is likely that consumers who score highly on certain decision-making characteristics will have clear needs associated with those characteristics that marketers could use to target them. For example, high scorers on the Recreational/Hedonism trait like shopping just for the fun of it and are likely to respond positively to upmarket shopping malls that accommodate different stores, in-store demonstrations and gimmicks, restaurants, and leisure facilities.

The degree of quality consciousness that exists in Germany has implications for international marketers targeting German consumers. Companies may find it more difficult to sell low-quality goods to German consumers, at least when such companies intend to compete with existing German brands. In addition, German consumers are likely to become wary when high-quality products are offered to them at low prices. As Germans say, "*Was nichts kostet, taugt nichts*" ("What costs nothing, is

no good”), which reflects Germans’ opinion that they are prepared to pay premium prices for certain products as long as the quality is right. Häagen-Dazs recently advertised in Germany with the following slogan: “*Wir sind so teuer, weil wir alles weglassen*” (“We are so expensive because of all we have left out”).

The Confused by Overchoice factor substantiates the idea that confusion is playing an increasingly significant role in today’s cluttered market place (Mitchell and Bates 1998) and could suggest the development of (1) special packages/products to aid consumers to make faster and more effective buying decisions (e.g., by offering products with larger fonts carrying less irrelevant information) and (2) less complicated products and product manuals. This finding also has implications for future research in terms of identifying other groups of consumers that are particularly susceptible to confusion (e.g., the elderly and foreigners).

The absence of a brand-loyal trait seems to be of greater concern from a marketer’s point of view because brand-loyal consumers are desirable for a number of reasons. First, they provide a solid base of customers into the future from which brand profitability can be built (Hoyer and MacInnis 1997). Second, loyal customers are more difficult for competitors to attract. In this context, Wells (1993) notes that it is four to six times less costly to retain old customers than to obtain new ones. Therefore, a major goal of marketers operating in Germany should be to develop brand loyalty. This is more difficult in Germany because of the regulations prohibiting comparative advertising. The goal is probably best achieved by communicating the benefits of brand loyalty, for example (1) lowered risk of buying an unsatisfactory product, (2) time savings, and (3) savings in decision-making efforts.

Thus far, little empirical research has been devoted to variety-seeking behavior in Germany. High scorers on the Variety Seeking factor tend to buy new products even though they continue to express satisfaction with their old brand, possibly because they want to maintain a certain level of stimulation. Variety-seeking consumers will be attracted to appeals that convey novelty, change, and stimulation. Previous studies have shown that variety-seeking behavior can be particularly prevalent in certain product categories, for example, instant soups (Givon 1984) or cereals (Bawa 1990). Extending the line of brands variety seekers are known to buy could be an appropriate strategy. However, because an increase in product variety generally requires more time and effort by consumers to learn about and evaluate the different brands, perhaps not all Germans will be well disposed toward more choice because they are not willing to

devote more precious time to brand decision making. Targeting variety seekers could be a viable strategy for smaller and/or less successful manufacturers because as Feinberg, Kahn, and McAlister (1992) conclude, "Increasing the consumer's desire for variety is likely to increase the market share of the least preferred brand" (235). Moreover, there is evidence that promotional activities and price discounts can increase sales in variety-seeking segments (Kahn and Raju 1991, 335), which may be useful tactics for German marketers to employ.

An extension of the CSI with obvious marketing implications would be to use it for market segmentation. When looking at the relevant literature (e.g., Mitchell and Bates 1998), there is reason to believe that consumers can be clustered meaningfully into segments, given that powerful discriminant decision-making traits can be found. Consumers in such segments are likely to display within-category product and service preference homogeneity, which can be the basis for the segment. For example, a cluster consisting of consumers who score highly on the Recreational/Hedonism, Novelty-Fashion Consciousness, and Variety Seeking factors would reflect different consumer decision-making characteristics than one consisting of consumers who are perfectionistic and brand conscious. Products that convey an image of quality, durability, and prestige, for example, are likely to appeal to members of the latter segment who demand well-known, superior products. However, marketers need to build an understanding of consumer decision-making styles so that future research can establish whether such segments exist and are accessible, sustainable, and stable.

The German CSI findings also have implications for consumer affairs. For example, impulsive, variety-seeking consumers can increase their propensity to get into debt. The identification of seven characteristics of decision-making styles can help to profile an individual's mental orientation toward shopping, which can then be used to educate consumers about their decision-making characteristics. Debt counselors could use the CSI to help identify a consumer's decision-making style, which would help them educate consumers to become more discerning and rational spenders. Eventually, if validated in other European countries, it could help consumer groups to identify broad differences in consumer decision-making styles that could be applied in pan-European debt-counseling educational programs. This type of education could help to prepare certain consumer segments with less experience to function more effectively as consumers.

CONCLUSIONS

Although the divergent commercial environments and nonequivalent samples might explain the differences in results, it is likely that the CSI inventory in its original form cannot be applied to different countries without substantive modification. This study found a seven-factor model was appropriate to profile German consumer decision-making characteristics, within which some factors differed from those in previous studies. There is some evidence for the cross-cultural validity of the scales measuring the perfectionistic, brand consciousness, recreational, and confused by overchoice traits, and a comparison of previous replications (see Table 6) reveals a limited cross-cultural validity for Price-Value Consciousness and Impulsiveness, the two weakest factors (both = .48) from the original study (Sproles and Kendall 1986). This is also true for the Brand-Loyal/Habitual factor, which was relatively unreliable in most countries and could not be found in the present study. Uniquely, the Variety Seeking trait was only found in the German data, although the internal consistency of the scale measuring this trait was only just satisfactory, indicating that the scale is a poor measure of it. The fact that a new factor was found suggests that the CSI is sensitive enough to be able to capture cultural differences and produce reasonable results. However, further exploratory qualitative research is needed to examine other aspects of German decision making, such as attitudes toward time. Time is an important factor to Germans; they dislike wasting it (*Zeitverschwendung*) and feel it must be used productively.

The fact that not all of the original factors could be confirmed in every country examined may indicate problems with the CSI in previous studies in other countries where additional qualitative research was not undertaken to explore the richness of that country's consumer behavior. The current CSI seems unable to measure consumer decision-making characteristics effectively in all countries. This deficit could be addressed in future cross-cultural applications of the CSI, which might be comprised of two components: one general component including the factors proved valid and internally consistent across cultures (i.e., Perfectionism, Brand Consciousness, Recreational, Confused by Overchoice) and additional country-specific factors. Any CSI specifically developed for Germany would have to take into account other peculiarities. For example, Germans are known to be environmentally conscious (Preisendörfer 1998; Cornwell and Schwepker 1997; Johnson and Johnson 1997). Therefore, future German research should consider the possi-

bility of adding additional dimensions, such as Environmental Consciousness and Time Consciousness.

ENDNOTES

1. Personality is the characteristic way in which an individual thinks and behaves as he or she adapts to the environment, including visible behavior patterns as well as less apparent but enduring characteristics, such as values, motives, attitudes, abilities, and self image (Kerby 1975).

2. Of course, this is only valid for most developed countries and not for developing countries where students often belong to a society's elite.

3. One study, for instance, reports that between 1980 and 1994 as few as eleven articles (2%) by German marketing researchers were published in the following internationally recognized journals: *Journal of Marketing*, *Journal of Marketing Research*, *Journal of Consumer Research*, and *Marketing Science* (Meyer 1996).

4. In Germany, at the age of eighteen people gain full legal age which entitles them to buy any (legal) product they desire.

5. Both Hamburg and Lüneburg are located in northern Germany. Hamburg, the second largest German city (Berlin is the largest), is a so-called Stadtstaat (city state, i.e., the city of Hamburg is one of sixteen German Bundesländer) and has a population of 1.7 million, of which 48.3 percent are male and 51.7 percent female. Lüneburg is located about 25 miles southeast of Hamburg and is a so-called Kreisstadt (district town). The population of Lüneburg itself is 65,000, whereas the whole primary administrative division of Lüneburg counts 136,000 people, of which 49.2 percent are male and 50.8 percent female.

6. Solutions with higher factor numbers were not treated as appropriate here, as the increase in explained variance of the ninth factor was rather marginal, and, also, no convincing interpretation of factors was possible.

7. Fan and Xiao (1998) argue that a more clear-cut model is needed because overlaps exist among the original dimensions. Responding to this, they put forward what they consider a more appropriate representation of consumers' basic mental characteristics of decision making (consisting of seven dimensions): 1) brand consciousness, 2) fashion consciousness, 3) quality consciousness, 4) price consciousness, 5) time consciousness, 6) impulsiveness, and 7) information utilization. The time consciousness factor combines both a time-energy conserving and recreational shopping trait, and the factor information utilization includes confused by overchoice and consumers' ability to process and take advantage of information available.

8. Total advertising expenditures in India, for instance, are sixty times smaller than that of the U.S. (Weißenberg 1997).

9. According to Hall and Hall (1990) context is the "information that surrounds an event" (6). When they talk of high-context and low-context cultures, this concerns the cultural rules around information exchange. Hall (1976) defines the two in the following manner: "A high-context (HC) communication or message is one in which most of the information is already in the person, while very little is in the coded, explicit, transmitted part of the message. A low-context (LC) communication is just the opposite; i.e., the mass of the information is vested in the explicit code."

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