CONSUMERS IN SLOVENIA: VALUES, PERSONALITY TYPES AND CONSUMERIST ATTITUDES

POTROŠAČI U SLOVENIJI: VRIJEDNOSTI, TIPOVI LIČNOSTI I POTROŠAČKI STAVOVI

TRŽIŠTE

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SAŽETAK

Cilj je našega rada istražiti veze između terminalnih i instrumentalnih vrijednosti, tipova ličnosti, stavova i ponašanja potrošača koji su relevantni za segmentaciju I odluke u marketingu. Razumijevanje ličnosti i vrijednosti pojedinih potrošača omogućava nam da predvidimo njihove preferencije i ponašanje. Skup stavova i ponašanja potrošača uključuje utjecaj prijatelja na ponašanje potrošača, potrošački etnocentrizam, vrijednost pri kupnji i hedonizam u kupovanju. Za analizu su korištena dva multivarijatna statistička pristupa: klaster analiza ličnosti i vrijednosti pojedinca, kao i faktorska analiza potrošačkih stavova i ponašanja. Analiza podataka na reprezentativnom uzorku od 1.094 slovenska potrošača

ABSTRACT

The aim of our paper is to investigate the links between terminal and instrumental values, personality types, consumer attitudes and behavior that are relevant to marketing decision-making. The understanding of the personality and values of individual consumers should enable us to predict their preferences and behavior. Our set of consumer attitudes and behavior includes reported peer influence on shopping behavior, consumer ethnocentrism, value shopping and hedonism in shopping. Two multidimensional statistical approaches are considered: a cluster analysis of the individual's personality and values and a factor analysis of consumer attitudes and behavior. An analysis of data from a repre-

(PGM, Valicon, 2007) otkriva pet različitih klastera nazvanih: savjestan-neprihvatljiv, ekstrovertiran, neurotičan i niskih vrijednosti, otvoren i visokih vrijednosti te prihvatljiv-savjestan-neotvoren. Razmatraju se smjernice za odlučivanje i razvoj marketinške strategije, kao za i moguće širenje istraživanja na potrošače različitih nacionalnosti iz zemalja srednje i istočne Europe.

sentative sample of 1,094 Slovenian consumers (PGM, Valicon, 2007) reveals five clusters: conscientious-non-agreeable consumers differ in their consumer attitudes from extroversive consumers, neurotic-with-low-values, open-with-high-values and agreeable-conscious-non-open consumers. Implications for marketing decision-making and strategy development are considered, together with a possible extension of the study to multiple national groups of consumers from Central and Eastern Europe (CEE).

1. INTRODUCTION

Knowledge about the basic characteristics of consumers, such as values and personality traits, are considered to be the cornerstone of understanding and predicting their purchase behavior.[1] Taken together, this knowledge is relevant for decision-making in marketing on various levels – from segmentation purposes that represent the focus of this paper to more tactical ones that are, for instance, related to communication purposes. A wide array of consumer characteristics explains various aspects of consumers as individuals and enables an insight into the drivers, factors and variations of consumers' psychological and behavioral (purchase) dynamics. For this purpose, motivation, values, personality, perception, learning and attitudes are considered to be the key characteristics of consumers.[2]

Despite the unquestionable relevance of such characteristics, their application in practice is often related to various challenges and dilemmas. The spectrum of possible segmentation variables is indeed vast as each of these general concepts contains numerous variations, dimensions, factors, types and measures that are multiplied when different authors and theories are considered. So, which ones to select and how to apply them is an important issue. On the one hand, there are general and broad concepts of values, personality traits and attitudes which are all warranted as they explain different aspects of consumer behavior. Yet, there is a question of how efficient these general concepts are in predicting specific behaviors.[3] In the field of marketing, this question is especially challenging. Marketers are interested in understanding specific, namely purchasing behavior, for which general psychological concepts and measurement instruments might be of questionable value. This is especially so as practitioners are normally interested in a differentiation of consumers and a prediction of purchasing behavior within a particular product category. For this purpose, van Raaij and Verhallen[4] suggest the use of a domain-based seg-

mentation, which is domain (product class) specific, rather than focusing on general behavioral patterns and consumer characteristics. Although this seems an adequate approach, it does not provide a complete answer to the question of how to select an adequate set of segmentation variables. This dilemma is further complicated by the growing body of literature which shows that, in addition to general consumer traits, more specific characteristics (concepts), such as hedonism, ethnocentrism and attitudes to sustainability, are also important.[5] An exhaustive set of potentially relevant sets of segmentation variables and a rich description of the derived segments certainly warrant the inclusion of such specific variables as well.

In an attempt to resolve these dilemmas and achieve an adequate balance between a comprehensive array of segmentation variables, their substantive relevance, discriminatory power and cost effectiveness (parsimony), marketers indeed face a tough task. For this purpose, commercial marketing research organizations often develop their own syndicated surveys, which take general psychological concepts and corresponding instruments and adapt them for specific marketing purposes. Chow and Amir[6] present the results of an analysis of such a survey, based on a global research study conducted by GFK NOP. They show how the international comparison of universal value structures can provide useful implications for segmentation purposes, brand management and media planning on a global scale. Similarly, with a more local, CEE focus, we attempt to segment Slovenian consumers by means of a syndicated survey called PGM,[7] which was developed by Slovenian market research company Valicon.[8] The PGM database is based on a field survey, which measures various indicators of brand performance in more than 90 FMCG categories (food, drinks, cosmetics, household cleaners etc.). As a broad single-source database, the PGM also contains various consumer characteristics, such as demographics (related to the individual and related to the household), shopping habits, various lifestyle variables, per-

sonality, values and media (including Internet) consumption. In addition, several more specific variables, such as ethnocentrism, country-of-origin perception and shopping attitudes including peer influence, are included in the PGM.

In our analysis of the PGM data, the emphasis was placed on a particular product category (i.e. cookies), within which we used a broad spectrum of general and specific consumer-related variables in order to establish their discriminatory power and relevance for segmentation purposes. The review of the relevant literature is presented first, followed by a presentation of the results of the data analysis. In the concluding part, marketing implications of the derived findings are presented and discussed.

2. LITERATURE REVIEW

By focusing on several key concepts we followed the imperative to build a more complete picture of various types of consumer behavior and to compare their predictive and discriminatory ability. Each of them explains only a certain aspect of the dynamics and factors of consumer behavior. Values, as universally valued goals (ideals) that are related to the "pull" motivation, can explain the reasons why and to which aspirations consumers are attracted. On the other hand, attitudes provide an insight into how consumers form evaluative judgments on products, brands, companies and other consumption-related issues.[9] Personality is yet more focused on the long-lasting personal traits that describe how individuals differ in their responses to the world around them.

Each of these key concepts has, however, been conceptualized in various ways by different authors (theorists), hindering their use in marketing. That is to say, it seems that marketing often emphasizes only certain theories of these key concepts or discusses them in isolation (as, for instance, Maslow's motivational hierarchy), without attempting to combine them within broader, multifaceted conceptualizations. Yet, some attempts at such conceptualizations and corresponding measurement instruments have been made in social psychology, and we discuss them here.

Personality can be defined as the inner psychological characteristics that determine and reflect how a person responds to his/her environment; it has three distinct properties: (1) reflects individual differences; (2) is consistent and enduring; and (3) can change.[10] The differences between personality theories mainly lie in the explanation of the origins, nature and content of various personality traits.

In marketing, the personality construct has largely evolved in two directions,[11] namely within the psychoanalysis school (where the emphasis is on defining and describing prevailing personality types) and within the so-called "multitrait" school, where exhaustive lists of personality traits are in the forefront (e.g. Catell's traits[12]).

Recently, there was an important attempt at combining and unifying the scope of various personality traits so as to define their underlying dimensions, called the "Big Five". This model of personality, which has proven useful in other business domains such as the human resource management (HRM),[13] was also considered a useful framework in marketing.[14] Despite such awareness, in the marketing domain the "Big Five" dimensions have more often been treated metaphorically and explored in relation to brand personality,[15] rather than being applied to the study of consumer personality.

The "Big Five" is an integrative framework of personality factors that is a result of the rapid convergence of views regarding the structure and concepts of personality. As such, it has no single author but is instead conceived of as a "grand unified theory of personality"[16] and even a paradigm,[17] although some authors conceive of it as alternative theory of personality.[18] The "Big Five" model is based on experience rather than a cer-

tain theory and is widely accepted as a broadly applicable and practical tool within management both by human resource academics and practitioners.[19] This model describes personality with five basic and robust factors which encompass a broader set of corresponding sub-traits or facets. These are:[20] E – Extroversion (warmth, assertiveness, enthusiasm, social adaptability and energy), A – Agreeableness (conformity, altruism, trust, compliance and modesty), C – Conscientiousness (competence, will to achieve, order, control, self-control, dependability, goal/task oriented), N – Neuroticism (negative emotionality, need for stability, worry, anger, discouragement, anxiety), O – Openness (inquiring intellect, originality, imagination, fantasy, aesthetics).

Although the lack of empirical studies of the "Big Five" model as a whole with regard to consumer behavior is evident, some studies support its relevance by indicating the importance of some of its factors or sub-facets. Matzler et al.[21] found that extroversion and openness are positively related to the hedonic product value and that personality traits directly (openness) and indirectly (extroversion, via hedonic value) influence the brand effect which, in turn, drives attitudinal and purchase loyalty. The openness factor is in addition relevant for consumer innovativeness, which was found to be related to consumer preparedness to try new products and technologies.[22] Despite this evidence, personality as a general predisposition is often treated as a poor predictor of specific consumer behaviors,[23] making it yet another argument for testing the discriminatory ability of the "Big Five" model and its variables within a specific product category.

Values are defined as beliefs about some desirable end-state that transcends specific situations and guides consumer behavior.[24] Values may be observed on individual and group levels (these are the so-called core values) and have received a great deal of attention in the social psychology and marketing literature.[25] For the conceptualization and measurement of values, several models and corresponding instruments have also been developed, including the List of Values (LOV), Values and Lifestyles (VALS), the Rokeach Value Survey and the Schwartz values survey.[26] Rokeach[27] identified two basic and complementary sets of values, namely a set of terminal and a set of instrumental values (Table 1). Terminal values are desired end-states or personal goals that apply to various degrees in many different countries while instrumental values represent the basic approaches or actions needed to achieve terminal values.

A different approach to finding (cultural) value differences was taken by Schwartz et al.[28]. Schwartz did not seek preferred outcomes (end-states) but rather asked respondents to assess 57 values as to how important they felt these values were as "guiding principles of one's life". Schwartz's work is separated into an individual-level analysis and a culture-level analysis, representing a major difference compared to the works of other authors. Schwartz distinguishes between value types and value dimensions. From data collected in 63 countries, with more than 60,000 individuals taking part, Schwartz derived a total of 10 distinct value types (power, achievement, hedonism, stimulation, self-direction, universalism, benevolence, tradition, conformity and security) in an individual-level analysis.

Unlike the "Big Five" personality inventory, Rokeach and Schwartz's value surveys have been more extensively used in the marketing domain.[29] Pitts and Woodside,[30] for instance, found that the Rokeach value structures were found to be linked to choice criteria, beliefs, intentions and past behavior for various products and brands. More recently, Chow and Amir[31] reported findings on an analysis of results of the global research study, based on Schwartz's typology which revealed six global value-based segments. On the global scale, they found a value structure of six types (strivers, fun-seekers, creative, devout, intimate and altruist) that can be further condensed to two underlying dimensions of hedonism versus pro-social, and conformity versus self-direction.

Table 1: Two types of values in the Rokeach Value Survey

Instrumental values	Terminal values
Ambitious (Hard working, aspiring)	A comfortable life (A prosperous life)
Broad-minded (Open-minded)	An exciting life (A stimulating, active life)
Capable (Competent, effective)	A sense of accomplishment (Lasting contribution)
Cheerful (Lighthearted, joyful)	A world at peace (Free of war and conflict)
Clean (Neat, tidy)	A world of beauty (Beauty of nature and the arts)
Courageous (Standing up for one's beliefs)	Equality (Brotherhood, equal opportunity)
Forgiving (Willing to pardon others)	Family security (Taking care of loved ones)
Helpful (Working for others=welfare)	Freedom (Independence, free choice)
Honest (Sincere, truthful)	Happiness (Contentedness)
Imaginative (Daring, creative)	Inner harmony (Freedom from inner conflict)
Independent (Self-reliant, self-sufficient)	Mature love (Sexual, spiritual intimacy)
Intellectual (Intelligent, reflective)	National security (Protection from attack)
Logical (Consistent, rational)	Pleasure (An enjoyable, leisurely life)
Loving (Affectionate, tender)	Salvation (Saved, eternal life)
Obedient (Dutiful, respectful)	Self-respect (Self esteem)
Polite (Courteous, well-mannered)	Social recognition (Respect, admiration)
Responsible (Dependable, reliable)	True friendship (Close companionship)
Self-Controlled (Restrained, self disciplined)	Wisdom (A mature understanding of life)

Source: Salomon, M., Bamossy, G., Soeren, A.: **Consumer Behaviour – A European Perspective**, Pearson Education, Harlow, 2002, pp. 630.

Although they found these six value types to be universal (global), the distribution (size) of particular segments differs considerably among various countries. In the countries such as the United Kingdom and Canada, fun-seeker and intimate are often dominant while in a cluster of Eastern European countries (Czech Republic, Poland, Hungary and Russia) the strivers and intimate segments are dominant. Interestingly, most countries do not consider creative values to be dominant, with the exception of the United States.

However, Lascu et al.[32] warn against the undifferentiated, region-centric treatment of consumer values in Eastern European countries as a homogenous whole. Namely, they found substantial differences among consumer segments in this area with regard to their instrumental and terminal values. More specifically, they found that a demographic segmentation can be effectively used for identifying consumers with different value structures in Poland but not in Romania, where a demographic segmentation is inefficient in this respect. In a similar vein, Bjerke et al.[33] tested differences in the value orientations of Scandinavian students using the Schwartz value list. They found some similarities but also important differences between Danish, Swedish and Norwegian students, suggesting that a value-based segmentation is also relevant to the within-region context.

Attitudes. Unlike values, the concept of attitudes focuses on a specific object (or issue). Attitude is defined as the enduring organization of motivational, cognitive and emotional processes with some link to our environment. It is a learnt predisposition to respond in a consistently favorable or unfavorable manner with respect to a given object.[34] For the purpose of explaining how attitudes affect and predict ac-

tual behavior towards a certain object, various models have been used,[35] of which the Fishbein multi-attribute model is considered to be the most influential.[36] This model measures three components of attitude, namely salient beliefs (key attributes of an object that are considered during its evaluation), object-attribute linkages (the perceived probability that the object has a key attribute) and the evaluation of the important attributes. This model has been widely applied in marketing for segmentation purposes, where the segmentation of consumers on the basis of important attributes was designated as benefit segmentation.[37] Yet, much like personality traits, attitudes exhibit a problem of predicting specific behaviors from general dispositions. Ajzen[38] investigated this issue and found that both concepts can be efficient in this respect only when a broader spectrum of behaviors is observed in various contexts and situations.

Ajzen and Fishbein[39] performed a meta-analysis of 142 studies on relatedness among attitudes and behaviors which yielded no consistent conclusions regarding this relation in general. Yet, this meta-analysis showed that attitudes are good predictors of behaviors when the specific elements of attitudes and behaviors (goals and activities, in particular) match. For the purpose of the improved predictive ability of attitudes they offered two suggestions, the first one being the pooling and generalization of behavioral observations across various situations and the second one being the inclusion of moderating variables. As a consequence, Fishbein's model was revised and improved with the addition of several moderating variables (attitude to behavior, subjective norm, perceived control, behavioral intention), which resulted in the theory of planned behavior.

These developments are highly relevant for the marketing field, where more attention is paid to the attitudes to specific marketing elements and factors that provide an additional insight into the relation between various components of consumer attitudes and consumption. The attitude-toward-the-ad model is, for instance, one such model that depicts the relationships between various elements of an attitude to the ad and an attitude to the brand.[40] Attitudes to advertisements and brands are, however, affected by numerous additional factors and attitudes. Moon,[41] for example, suggested a model in which attitudes to foreign advertisements are explained by ethnocentricity and the attitudes to foreign culture. Following this model, on a sample of Slovenian consumers Vida[42] found that ethnocentricity affects the attitudes to foreign advertisements and that these attitudes are related to the attitudes to foreign brands while ethnocentricity is not directly related to the attitudes to foreign brands.

Other, more specific attitudes, such as ethnocentrism, country-of-origin attitudes, shopping attitudes and several other variables that are also included in the PGM survey/database (e.g. peer influence), therefore seem highly relevant as additional segmentation variables.

3. METHODOLOGY AND RESULTS

The analysis is based on data from a national representative sample (15-65 years) of 1,094 Slovenian consumers.[43] The sampling design is a two-stage sampling and random-route. The researchers conducted face-to-face interviews. The data include the socio-demography of respondents (gender, age, status, education and income), values & lifestyles (free-time activities and frequency), consumer habits (shopping habits, general FMCG consumption, expenditures, consumer indicators, retail chain loyalty, eating habits, eating habits indicators) and attitudes. Our interest in this paper encompasses the personality and values of individual customers, consumer indicators of attitudes and relevant behavior.

Personality types are measured by 52 items covering the constituent traits of the "Big Five" factors of personality. Factor analysis is used for the data reduction and summarization. Bartlett's Test of Sphericity is highly significant, indicating that variables are correlated in the population. Kaiser-Meyer-Olkin Measure of Sampling Adequacy is 0.882, showing the appropriateness of the factor analysis. Since our primary concern is to identify the underlying dimensions of the "Big Five" factors in line with the literature, a common factor analysis with the principal axis factoring is applied. The number of factors is therefore *a priori* determined at five. The factors are rotated (a varimax rotation with a Kaiser Normalization). The variables that correlate highly with more than one factor are excluded from further analysis (12 variables). The factors can be interpreted as follows: 1 – Conscientiousness, 2 – Extroversion, 3 – Neuroticism, 4 – Agreeableness, and 5 – Openness (see Table 2). Each factor is composed of the variables that load 0.40 or higher on that factor. In all, the five factors explain 31.7% of the total variance. Following an interpretation of the factor-loading matrix, factor scores are calculated as composite variables (factors) for use in a subsequent multivariate analysis.

Values are measured by 28 items covering Rokeach's terminal values and instrumental values. Factor analysis is again used for the data reduction and summarization. Bartlett's Test of Sphericity is highly significant, indicating that the variables on values are correlated in the population. Kaiser-Meyer-Olkin Measure of Sampling Adequacy is 0.910, showing the appropriateness of the factor analysis. Since it is our chief concern to identify the underlying dimensions of the two sets of values, terminal and instrumental, a common factor analysis with the principal axis factoring is applied. The number of factors is therefore *a priori* determined at two. The factors are rotated (a varimax rotation with a Kaiser Normalization). Two variables are excluded since they are not correlated

highly with any of the two factors while none of the variables correlates with more than one factor. The factors can be interpreted as follows: 1 – Terminal values, 2 – Instrumental values (see Table 3). In all, the two factors explain 27.5 % of the total variance. Similarly with the personality types, factor scores are calculated for values as composite variables (factors) for use in a subsequent multivariate analysis.

Based on the composite variables for personality types and values, a cluster analysis of personality and the individual's values is applied. A large subsample of consumers with experience in one of the categories of FMCG is selected (cookies), so the sample size is reduced to 732 consumers. The objective of the cluster analysis is to classify respondents in homogeneous groups, based on their personality types and values. This should enable recognition of the segments in the market and help us understand buyer behavior. The measure of similarity used is the Euclidean distance. Hierarchical clustering is applied with the commonly used variance method of Ward's procedure. The number of clusters is obtained from an agglomeration schedule and a dendrogram. The five-cluster solution seems appropriate. When examining the cluster centroids, we interpret and profile the clusters as follows (see Table 4):

- Cluster 1: *conscientious-non-agreeable* consumers are high on conscientiousness, low on extroversion and agreeableness.
- Cluster 2: *neurotic-with-low-values* are low on terminal values and instrumental values, high on neuroticism.
- Cluster 3: *extroversive* consumers are low on conscientiousness, high on extroversion.
- Cluster 4: *open-with-high-values,* high on terminal values, instrumental values, conscientiousness, extroversion and openness.
- Cluster 5: *agreeable-conscious-non-open* consumers, high on conscientiousness, agreeableness, low on instrumental values, neuroticism and openness.

Table 2: Personality types – factor analysis, pattern matrix scores for selected items

Selected scale items	Factor				
	1 – Conscientiousness	2 – Extroversion	3 – Neuroticism	4 – Agreeableness	5 - Openness
Capable	.665				
Intelligent	.564				
Organized	.553				
Innovative	.528				
I love entertainment		.734			
Enjoy at parties, where there are many people.		.706			
I like to be surrounded by a crowd of people.		.665			
I like to be where things are happening.		.646			
Sometimes, it all seems lost and hopeless.			.692		
Sometimes, my thoughts are desperate.			.612		
Often, I feel less worthy than others.			.602		
Sad			.592		
Patient				.419	
Competitive				-.410	
If hurt by someone, I try to forget and forgive.				.349	
Adventurous				-.335	
I am attracted by forms, which are found in nature and the arts.					.509
When I read poetry or watch a work of art, sometimes I fell excitement.					.493
I like fantasy and day-dreaming; I enjoy them and leave them to develop.					.425
In principle, I believe in the goodness of human nature.					.337

Table 3: Values – factor analysis, pattern matrix scores for selected items

Selected scale items	Factor	
	Terminal values	Instrumental values
True friendship (reliable friends who are close)	.729	
Safety of the family (security of those we love)	.616	
Sense of belonging (have the feeling of importance to others)	.453	
Enjoyment of life (enjoyment of leisure, food, beverages)	.359	
Influence (impact on people or events)		.570
Preservation of reputation (how others see you)		.479
Boldness (looking for adventure)		.450
Ambition (desire for progress, hard work, being diligent)		.305

Table 4: Cluster centroids

Composite variables	Cluster				
	1	2	3	4	5
Values 1:Terminal values	.37121	-1.01076	-.02397	.87199	-.20418
Values 2: Instrumental values	.29767	-.65359	-.19754	1.03205	-.58067
Personality 1 – Conscientiousness	.40506	-.28937	-.84994	.41908	.38571
Personality 2 – Extroversion	-1.03608	-.31777	.54301	.48238	-.09709
Personality 3 – Neuroticism	.12627	.77962	-.12230	-.01761	-.81704
Personality 4 – Agreeableness	-.80133	.19001	-.73999	.34235	.66582
Personality 5 – Openness	.02838	.28479	-.36218	.53275	-.64603

These segments consist of an approximately equivalent number of respondents: the *conscientious-non-agreeable* consumers segment represents 14% of the sub-sample, the *neurotic-with-low-values 21%*, the *extroversive* consumers account for 20%, those *open-with-high-values* 25% while *agreeable-conscious-non-open* consumers represent 20% of the sub-sample. To assess the reliability and validity of the clustering solutions, different distance measures are applied: a comparison of results across measures and different methods of clustering shows the stability of our solution.

Before comparing different segments of respondents in terms of their consumer attitudes and behavior, factor analysis is used for data reduction and summarization. Consumer attitudes are measured by 19 items covering attitudes to shopping, peer influence, ethnocentrism, perception of shopping value and expert trust. Bartlett's Test of Sphericity is highly significant, indicating that variables are correlated in the population. The Kaiser-Meyer-Olkin Measure of Sampling Adequacy is 0.771, showing the appropriateness of the factor analysis. Since it is our primary concern to identify the underlying dimensions, a common factor analysis with the principal axis factoring is applied. The number of factors is again *a priori* determined at five. The factors are rotated (a varimax rotation with a Kaiser Normalization). The variables that correlated highly with more than one factor are excluded from further analysis (five variables). The obtained factors can be interpreted as follows: 1. peer influence (explains 22.8% of the variance),

2. ethnocentrism (15% of the variance), 3. value (8.8% of the variance), 4. shopping as fun (6.7% of the variance) and 5. expert trust (3.7% of the variance, see Table 5). Each factor is composed of the variables that load 0.40 or higher on that factor. In all, the five factors explain 57.1% of the total variance. Following the interpretation, factor scores are calculated as composite variables (factors) for use in a subsequent multivariate analysis.

influence, ethnocentrism, value, shopping as fun and expert trust factors. The segments differ in their average scores on consumer attitudes (see Figure 1): Cluster 1, conscientious-non-agreeable consumers, is low on peer influence, shopping as fun and expert trust. Cluster 2, neurotic-with-low-values, is very high on peer influence and high on ethnocentrism, value shopping and also expert trust. Members of Cluster 3, extroversive consumers, are very low on ethnocentrism,

Table 5: Consumer attitudes – factor analysis, pattern matrix scores

Scale items	Factor				
	Peer influence	Ethno-centrism	Value	Shopping as fun	Expert trust
Shopping is fun.				.861	
I like shopping.				.819	
When I go shopping, I cannot stop.				.648	
I wonder what my friends think about things I bought.	.594				
When I shop, I rather consult than make decisions on my own.	.638				
Before purchases I sometimes like to consult with my relatives.	.744				
I often talk to my friends about shopping.	.525				
I prefer to endorse Slovenian products, although this costs me more in the long run.		.805			
I prefer product of Slovenian producers.		.813			
Slovenes should buy Slovenian products and services.		.749			
I usually buy in the shops where prices are most favorable.			.794		
When shopping, I always look to get as much as possible for my money.			.769		
I trust the things recommended by experts.					.746
For environmentally friendly products I am willing to pay more.					.578

Differences between the five clusters (segments) of respondents in terms of how they evaluate consumer attitudes are analyzed with a one-way analysis of variance. Consumer attitudes included are determined by the factor analysis as peer

value shopping and expert trust, but rank the highest on shopping and fun. Cluster 4, open-with-high-values, is high on value and shopping as fun. Finally, Cluster 5, agreeable-conscious-non-open consumers, is the highest on ethno-

centrism, value shopping and expert trust, and the lowest on peer influence.

The differences among consumers are also examined in relation to the selected product category, cookies. The brands with the highest recognition and experience rate are selected for the analysis. A comparison of the consideration of purchasing these brands of cookies among different clusters of consumers shows some tendencies in the differences, although they are not statistically significant (Chi-square =3.9, 4 d.f., sig. 0.40). Among those that consider buying highly-recognized brands of cookies, consum-

Figure 1: Comparison of consumer attitudes for the five consumer segments
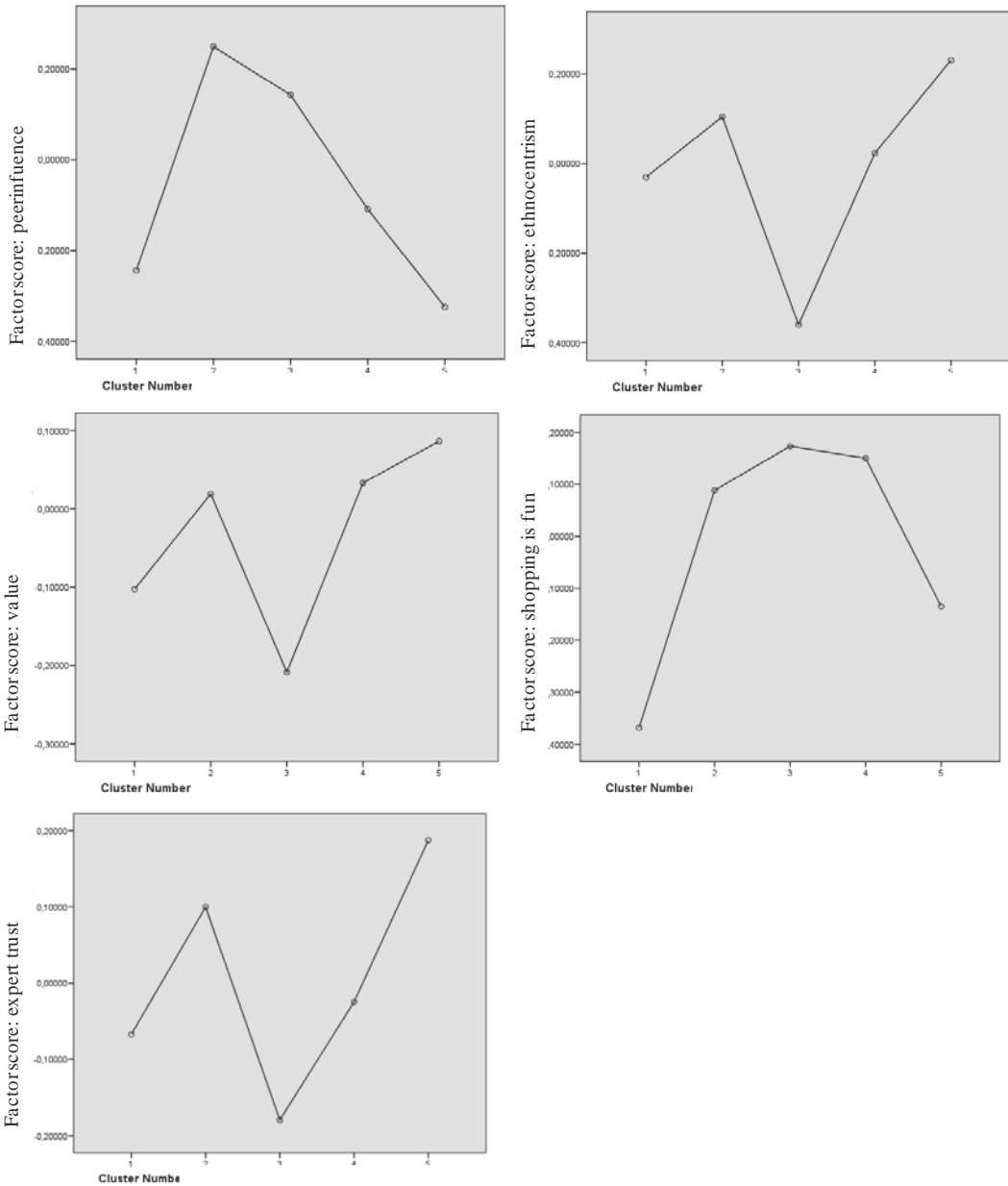
ers in Cluster 2 (neurotic-with-low values) and in Cluster 5 (agreeable-conscious-non-open consumers) tend to be overrepresented while Cluster 1 (conscientious-non-agreeable consumers), Cluster 3 (extroversive consumers) and Cluster 4 (open-with-high-values) tend to be underrepresented (see Table 6). The differences among clusters in terms of brand consideration are minor compared to the differences in consumer attitudes presented before. Some implications of the relations among the clusters based on personality and value traits and their consumer attitudes and buying intentions are the following.

deliberation regarding the approach to and the management of the segmentation process.

In our case, the theoretical background and available data allow us to combine several steps and analyses into a less conventional research approach. First, we took the "Big Five" personality framework that represents a meta-model of personality and the list of values from the Rokeach value survey and tested their structure on a database of Slovenian consumers. In order to reduce (condense) the segmentation variables further, personality and value dimensions were

Table 6: Consideration of the brand of cookies

	Cluster Number					Total
	1	**2**	**3**	**4**	**5**	
No Consideration	14.0%	20.8%	20.6%	25.5%	19.1%	100.0%
Consideration	11.4%	27.1%	17.9%	22.1%	21.4%	100.0%
% of Total	13.5%	22.0%	20.1%	24.9%	19.5%	100.0%

4. IMPLICATIONS AND CONCLUSION

This paper addresses several questions related to the segmentation and explanations of consumer behavior. One is the selection of possible segmentation variables within a broad array of general characteristics and concepts, such as personality, values and attitudes and their corresponding sub-dimensions. This becomes a progressively more complex task as these general constructs are related to more specific concepts (e.g. ethnocentrism) and are aimed at specific behaviors that are often domain-(product class)specific. In such a situation it seems that the attainment of an adequate balance between a comprehensive set of segmentation variables, their substantive relevance, discriminatory power and cost effectiveness (parsimony), inevitably requires certain compromises. But, above all, such a challenge requires careful, "strategic"

simultaneously applied to a domain-specific sub-sample (i.e. cookies product category users). As a result, five personality-value based clusters (segments) were derived for the chosen product category and analyzed with respect to the underlying factors of various shopping-related attitudes and behavioral intentions regarding the purchase of a particular brand of cookies.

The results indicate that the five key personality dimensions of the "Big Five" model and the two value dimensions proposed by Rokeach[44] may be validly applied to the CEE market under investigation. The structure of both models was faithfully replicated, attesting to their universality and applicability. Combining personality and value dimensions within a particular product domain, in addition, yielded five sensible segments with rich multi-dimensional descriptions which were of approximately equal size. A detailed inspection and comparison of particular segments revealed that, while certain personality patterns

may be identified, they can differ substantially regarding the importance they attach to values (see e.g. Clusters 3 and 4, which are both high on extroversion and yet differ extremely on both value dimensions). This suggests that general consumer behavior constructs are applicable not only individually (or *per partes,* as often only particular dimensions of such constructs are investigated) but that they may also be successfully combined for segmentation purposes. Their combinations may therefore be used for general segmentation frameworks, where their common sub-dimensions may be effectively used for comparisons of segments if their universality is established.[45] In this case, even a combination of alternative theoretical models of a single construct can be useful – as, for instance, a combination of Rokeach's and Schwartz's models which could yield a similarly integrative framework (with corresponding meta-dimensions) as does the "Big Five" in the personality domain. Also, it would be useful to compare the size of the derived segments and average values of a particular value and/or personality between various countries in the CEE besides Slovenia, and which might represent a possible extension of the present study.

The approach applied here also indicates how general (and even meta-) constructs may be compared with regard to more specific (shopping) attitudes. In this respect the results exhibit sensible relationships and support (intuitive) expectations. *Conscientious-non-agreeable* consumers are, for instance, found to be low on peer influence, and expert trust. *Neurotic consumers,* on the other hand, seem to compensate their lack of self-reliance and value orientations with a high peer influence, ethnocentrism and expert trust. The *extroversive and open minded* segments both score high on value shopping and shopping as fun, while *agreeable, non-open consumers* score highest on ethnocentrism, expert trust and yet are lowest on peer influence.

The established links among value and personality dimensions and specific attitudes provide support for further integration of general and specific constructs, where their structural linkages could be applied in terms of a means-end-based segmentation.[46] What is more, further linkages among the examined constructs could yield not only more comprehensive means-ends chains but could result in an expanded taxonomy as a basis for segmentation purposes. In this case, the "vertical" links between product attributes and desirable end-states (values) could be complemented and expanded with "horizontal" descriptions of prevailing attitudes and personality profiles.

However, the findings and implications regarding discriminatory power of personality, values and attitudes are less conclusive when it comes to the level of specific behaviors. Derived segments were compared in terms of their preferences (i.e. consideration for purchase) for the brands of cookies with the highest recognition and experience rates. Although the differences in the distribution of segment members with buying intentions compared to those without are not statistically significant, we found tendencies for higher percentages of consumers in Cluster 2 and 5 – both scoring high on ethnocentrism, value for money shopping attitudes and expert trust – who seem to have chosen these cookies because of their wide acceptance/popularity and good/trusted value for money. In the tendency, the percentages are lower for the other three segments, suggesting that brands with a high recognition and experience rate are not relevant to conscientious or extroversive individualists, and neither are they relevant to value-oriented and open-minded consumers. Based on these findings, some interesting managerial implications can be derived which, for instance, suggest an examination of the fit between the positioning strategy and segment profiles at the level of particular brands.

A further examination of the linkages between general concepts and specific behaviors is thus warranted in order to explain other possible factors that impact on these relationships, category-specific factors for instance. Cookies are considered a "variety-seeking" product category. Thus,

the question of whether segment profiles will be more discriminatory and consistent regarding purchase behavior seems highly relevant when it comes to "ego/value-expressive" products. Another such factor that should be considered is the relationship between planned and actual behaviors. In other words, it is important to note that specific brand-related types of behavior are examined in our analysis by means of behavioral intentions, hence the use of behavioral proxies and not actual behavior.

These deliberations, which suggest caution in deriving implications at the level of specific constructs, product domains and behaviors, should however not obfuscate the key implication of this study. Namely, its results suggest that while more general (condensed, abstract) segmentation variables are potentially less accurate in predicting specific behaviors, without doubt they assure the richer descriptions and more universally applicable frameworks that are needed for an international and cross-domain-focused comparison of the derived segments.

This suggests that the purpose and goals of segmentation need to be clearly defined in advance – for instance, the goal of rich description may require an entirely different theoretical focus and research approach than the goal of accurate prediction, discrimination and size estimation of a particular segment. In this respect, the concepts addressed and their respective analysis in our case seem to be suitable primarily for a holistic understanding and rich description of segments, therefore for substantive, sense-making and inspirational purposes rather than for the prediction of specific brand-related behaviors. Still, quantitative aspects of analysis are not precluded as the available data enables not only an estimation of the discriminatory power of investigated variables but also an assessment of the segment size and a comparison of the average values of various "profiling" variables. Further research into these aspects of segmentation is needed in CEE international contexts and across various product categories in order to provide more valid and operative implications for international marketing strategies.

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