

PROFILE OF CONSUMER DECISION-MAKING STYLES AND RETAIL FORMAT CHOICE

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ABSTRACT

In this paper profile of consumer decision-making style is treated as predecessor of preferences for retail format choice. Particular consumer's decision-making styles profile influence shopping behavior. The authors wanted to explore if, and in what sense, the revealed preferences for choosing particular retail formats (measured as declared frequency of shopping) can be described in more detail, and connected with perceived consumer decision-making styles concept. Results shown, that eight form nine consumer decision-making styles are predecessors of retail format choice in terms of causality assessed using structural equation techniques. More pronounced styles like: compulsive orientation toward shopping, recreational/hedonistic style as well as price-value consciousness are influencing shopping activities in 4 to 8 retail types. Research has been done on sample of Polish consumers representative to Internet users (regarding Internet shopping), gathered using paper-and-pencil interview. Presented analysis uses a data from research project funded by Polish Ministry of Science and Higher Education (grant number 1 H02C 077 30).

Keywords: retail format choice, consumer decision-making style, Poland

INTRODUCTION

The main goal of this paper is an exploration of consumer decision-making styles influence on the choice of retail format. Main research questions include: which styles of 9 investigated influences (excluding situational factors) the general choice of retail format (from 12 formats typical for Polish retail sector). The relationships are tested using structural equation modeling approach

Our approach is focused on selected factors internal to the consumer, including mentioned mental orientation toward shopping, manifesting itself in level of particular decision-making styles. Some demographic variables as gender, age and declared income per household member are considered.

Other internal factors (i.e. perceived level of emotional effort associated with shopping – in terms of perceived risk and trust for retail format as a whole and particular shopping place) are out of scope of our investigation, as well as factors external to the consumer (for instance: perceived general price level for the format, and for particular place, physical effort to buy – including travel cost), despite of their importance for perceived total cost of buying by the consumer.

We want to note that our research and conclusions are made investigating consumers in Poland only, and are referring to retail structure in this country. For other markets and countries mainly from cultural differences reasons, the care must be taken when this approach is applied.

BASIC INFORMATION ABOUT RETAIL SECTOR IN POLAND

Domestic trade in Poland is the second source of GDP (including retail and wholesale), with a share in GDP creation of about 15.8% in 2008. This share slightly decreased during last 10 years (GUS 2009). The total turnover of retailers in 2008 increased by about 5% in real prices comparing year 2007 (GUS 2009). Economic slowdown during 2009 decreased growth rate of retail turnover to the level of 2.7% in real terms (GUS 2010).

Polish Central Statistical Office estimates number of retailers as close to 385 thousands (excluding internet shops using “pure-play” business model). This number increased with rate of 3.9% yoy (GUS 2009).

In Polish retail structure, small stores with sales area 99m² or less, are dominating with a share of 92.4% in total number of stores, and a share of 52.8% in total sales area of retailers as a whole. Slightly more than 3600 outlets are classified as supermarkets (ca. 0.9%) and about 460 ones – as hypermarkets (ca. 0.1%) according to Polish CSO (GUS 2009).

There are also over seven thousands of internet stores operating in Poland (Internet Standard 2009). About 39% from them are so called “brick-and-mortar” model followers. Nearly $\frac{3}{4}$ of internet stores owners are selling also on Internet auction platforms, mainly Allegro.pl (Internet Standard 2009). The share of the internet stores and auction platforms (together) in total retail turnover is estimated as close to 2%, which means that internet retail turnover should be close to 11 billions of PLN – about \$3,8 billions (Internet Standard 2009). The share of Internet stores in this market is over 41%, the rest belonging to auction platforms (Internet Standard 2009).

CONSUMERS’ DECISION-MAKING STYLES CONCEPT

A consumer decision-making style is defined as “a mental orientation characterizing a consumer’s approach to making choices” (Sproles & Kendall 1986, p. 268). So those styles are relatively stable constructs, connected to consumer personality (Sproles & Kendall 1986), perceived as “basic buying-decision making attitudes that consumers adhere to, even when they are applied to different goods, services or purchasing decisions” (Walsh et al. 2001, p. 121). Particular shopping activities and attitudes toward shopping are treated as direct outcomes of consumer’s decision-making style (Tai 2005).

Sproles & Kendall (1986) developed two multidimensional scales to measure consumer decision-making styles – “longer” version with 40 items called CSI – Consumer Styles Inventory, and more concise one with 24 items – PCS – Profile of Consumer Style (Sproles & Kendall, 1986). Both scales have originally eight following dimensions (decision-making styles): perfectionism or high-quality consciousness (PERF), brand consciousness or “price equals quality” (BC), novelty-fashion consciousness (NFC), recreational or hedonistic consciousness (RSC), price-value consciousness or “value for money” (PVC), impulsiveness

or carelessness (IMP), confusion from overchoice (CO), and habitual, brand loyal orientation toward consumption (HBL).

Perfectionism as a consumer decision-making style manifests itself in tendency to buy/prefer only the best quality and/or products offering unique value for the user. Perfectionists “must have” those special products, i.e. advanced smartphones, high-end audio equipment, not considering high prices as a barrier to buy. Consumers higher in this style often shop carefully, systematically and compare many products before taking decision. This style is often more pronounced in men, and high income consumers.

Brand consciousness connects with high preference to buy particular more expensive and well-known world and national brands, mostly having large market share, and intensively advertised. Brand conscious consumers often think that “price equals quality”, and perceive buying cheaper brands as risky in terms of quality or image, so not worth considering. Sometimes they are strong brand’s “advocates” swearing loyalty for i.e. Apple products.

Novelty-fashion consciousness is a style described by the tendency to seek new products, recently introduced on the market, products that are perceived as stylish, trendy (i.e. clothing, electronics), not because of their utility value but because of fashion issues. High scores on this style are likely for women and young people gaining pleasure from seeking new up-to-date things, including shopping from variety-seeking reasons.

Consumers having high scores on recreational (hedonistic) style, like shopping (not exactly equal to buying), and are perceiving this activity as a form of entertainment. They like to “feel” retail environments, their atmosphere, image and other people.

Price-value conscious consumers represent the “value for money” shopping orientation. They like promotional offers and low prices in general, but are likely the comparison shoppers – pursuing getting the best value for their spending.

Impulsive or careless consumers do not like to plan their shopping, not think about the way and amounts they spent, and about “big deals”.

Consumers more likely confused by overchoice have difficulty in making choices during shopping – they perceive retail as too many brands and/or stores, which drives them to experience the information overload.

Pronounced habitual, brand-loyal orientation for shopping means that consumers have formed habits in making decisions, including buying in favorite stores and buying brands with higher. They often based on simple repetition of previous choices. Men and older consumers more likely represent this style.

Consumers’ decision-making styles are not independent – particular person does not possess only a single style, but rather an individual combination of them, creating personal profile of all styles manifesting itself on different levels, from which some styles are more intense or prominent (Sproles & Kendall 1986). Consequently, each person possesses a specific, individual profile of decision-making styles.

Since original research of Sproles & Kendall (1986) several studies applied consumers’ decision-making styles approach to different cultures, recently including among others: German consumers (Walsh et al, 2002), Chinese ones (Tai, 2005), and Polish (authors studies – Maçik & Maçik, 2009).

PREFERENCES FOR RETAIL FORMAT CHOICE

Preferences for retail format choice depend on factors external to the consumer and internal ones. External factors among others include (Peter & Olson 2002):

- perceived price level (for the format, and particular place),
- physical effort to buy (including commuting),

- time amount of designated for shopping – most of external factor are creating perceived total cost of buying for the consumer. Among internal factors there are i.e.: consumer demographics, and – which is important from this paper aims – consumer personality manifesting in decision-making styles and perceived level of emotional effort connected with shopping (mostly in terms of perceived risk and trust for retail format and particular shop).

There should be noted that literature about store choice issues has quite long tradition, starting mainly in the 70's of the 20th century. From earlier studies there is a need to mention – among others – the works of: Monroe & Guiltinan (1975), Arnold, Ma & Tigert (1978), Darden (1979), Arnold, Oum & Tigert (1983), Mason, Durand & Taylor (1983), Keng & Ehrenberg (1984), Eagle (1984), Louviere & Gaeth (1987), Spiggle & Sewall (1987), Dawson, Bloch & Ridgway (1990), Burke et al. (1992), Arnold, Handelman & Tigert (1996). In most cases, the authors of such publications have tried to rationalize store choice using different approaches, regarding external and internal factors to the consumer, including studying the store attributes and situational factors, as well as shopping patterns, attitudes toward stores shoppers and their households demographics, , implied importance weights of factors like price level.

Some more recent research examined i.e. the impact of task definition on store choice (Kenhove, Wulf & Waterschoot 1999), but most of mentioned store choice studies have been restricted to the same store format, i.e., supermarkets or discount stores. Another problematic approach is arising when a complete overlap of assortments in different formats is assumed, like in studies by Lal & Rao (1997) or by Krider & Weinberg (1998), because is very easy to prove that only for selected product categories it can be true.

There also exist some studies examining the influence of retail pricing formats on shopping behavior (Bell, Ho & Tang 1998; Ho, Tang & Bell 1998), often assuming that one store format has in general higher prices than the other one.

Bhatnagar, & Ratchford (2004) represent interesting approach, unfortunately limited to non-durable goods. Exploring fixed and variable costs of shopping, including assumption about consumers preferring to shop at minimum total cost, and different price levels between formats, they found conditions in which the store format choice would be optimal.

Looking for general factors influencing store format choice, we wanted to prove that consumer mental characteristic should explain some behavior regarding particular store formats and chains/outlets. Because of exploratory character of this study, we focused on measuring shopping outcome only, dropping attitudes from direct consideration.

SAMPLE

The sample of 1067 Polish consumers (aged at least 15 years old) interviewed by paper-and-pencil technique (PAPI) has been used to gather the data. Getting nationwide sample representative to the Internet users' population has been used, taken during two-stage sampling processes. In each of 16 voivodships (NUTS 3 level territories), three towns were selected on first stage, differing by number of inhabitants. On second stage, quota sampling has been used, taking into account participant gender, age and earned income.

For this sample used data on shopping formats preferences and consumer decision-making styles were only a part of the questionnaire – other gathered data, regarding more detail about Internet Shopping adoption are not discussed in this paper.

SCALES DEVELOPMENT

In this paper used scales include: Polish adaptation of PCS scale, and multi-item scales measuring declared frequency of shopping at 12 selected retail outlet types (single item for each type), including 10 conventional types and 2 e-retail types and demographic factors (age, gender, disposable income and type of residence place),

Authors of this paper reconstructed the used version of PCS scale by Sproles & Kendall (1986) earlier. Our polish adaptation of PCS consists of 27 items selected using factor and reliability analyses in 9 dimensions. Eight dimensions are styles present in CSI and PCS, and the ninth additional one – compulsiveness (COMP) – has been added on the base of previous authors research on unplanned buying and its determinants (Maćik & Maćik 2005). Previously mentioned the Unplanned Buying Scale (UBS) by Maćik & Maćik (2005) has been used, being a reception of hedonic, impulsive and compulsive buying tendencies, described for instance by Hirschman & Holbrook (1982), Rook & Fisher (1995), and Faber & O'Guinn (1992).

Added compulsive orientation toward shopping includes items measuring facets of uncontrolled buying behavior and spending too much in relation to income.

All constructs from PCS scale were measured using Likert-type scale of 1-5 with ends worded “strongly agree” and “strongly disagree”. Scale measuring declared frequency of shopping used 5 frequency descriptions ranging from “never” to “daily”.

INTERNAL CONSISTENCY AND CONSTRUCT VALIDITY

Internal consistency of individual scales for measuring particular construct has been assessed by using Cronbach's Alpha coefficient (Cronbach, 1951).

The results are shown in table 1 for PCS. For 6 of 9 identified consumer's decision-making styles Cronbach's Alpha is over or close to typical value 0.70, suggesting enough internal consistency (table 1). For 2 other dimensions Alphas are over or close to acceptable

minimum for short scales of 0.6, and for impulsiveness scale the reliability is too low. This suggests the need to improve their wording in the future. Each defined style is distinct from others – intercorrelations between particular styles are low (the highest equal to 0.45) – which suggests good discriminant validity.

Table 1. Internal consistency of consumer styles (PCS dimensions) and their intercorrelations

Con-struct	# of items	Cronbach's Alpha	Pearson's correlation coefficient between constructs									
			PERF	BC	NFC	RSC	PVC	IMP	CO	HBL	COMP	
PERF	3	0,58	1,00	0,09**	0,23**	0,10**	-0,16*	-0,13**	-0,04	0,10**	-0,06	
BC	3	0,71		1,00	0,38**	0,28**	0,03	0,17**	0,03	0,02	0,27**	
NFC	3	0,82			1,00	0,45**	-0,12**	0,12**	-0,02	0,07*	0,24**	
RSC	3	0,85				1,00	0,02	0,19**	0,06	-0,05	0,45**	
PVC	3	0,65					1,00	0,00	0,18**	-0,01	0,05	
IMP	3	0,45						1,00	0,14**	-0,03	0,33**	
CO	3	0,69							1,00	0,02	0,07*	
HBL	3	0,69								1,00	-0,19**	
COMP	3	0,83									1,00	

** p < 0.05 * p < 0.01

Next step in assessing construct validity was exploratory factor analysis using principal component extraction method with varimax rotation. This procedure has been performed to confirm that all scales are measuring distinct constructs. For adapted PCS existence of 9 proposed consumer's decision-making styles was confirmed – table 2. Nine factors with eigenvalues greater than 1 explained about 66.8% of total variance. Each style is separated factor with high loadings in both samples, with no cross loadings above 0.44, this indicates very good discriminant validity.

Also for the declared frequency of shopping in particular retail format Cronbach's alpha has been calculated being equal 0.73. Because each format has been treated individually for modeling there was no factor analysis performed in that case.

Table 2. Principal components analysis (with Varimax rotation) for PCS subscales^a

Scale items	Factors								
	1 (RSC)	2 (COMP)	3 (NFC)	4 (BC)	5 (CO)	6 (HBL)	7 (PVC)	8 (PERF)	9 (IMP)
PERF1								0.818	
PERF2								0.778	
PERF3								0.512	
BC1				0.778					
BC2				0.796					
BC3				0.701					
NFC1			0.825						
NFC2			0.851						
NFC3			0.716						
RSC1	0.820								
RSC2	0.829								
RSC3	0.792								
PVC1							0.755		
PVC2							0.723		
PVC3							0.753		
IMP1									0.768
IMP2									0.720
IMP3									0.424
CO1					0.793				
CO2					0.799				
CO3					0.716				
HBL1						0.848			
HBL2						0.853			
HBL3						0.622			
COMP1		0.747							
COMP2		0.811							
COMP3		0.852							
Eigenvalue	2.44	2.38	2.26	2.05	1.93	1.89	1.83	1.80	1.43
Cumulative									
% of explained variance	9.05	17.86	26.23	33.82	40.99	48.00	54.80	61.48	66.80

^a low factor stores are omitted for the sake of presentation clarity, no omitted score has been greater than 0.4

DATA ANALYSIS

Presented analyses have been made using SPSS 14.0PL (for preliminary purposes) and AMOS 7.0 structural equation modeling software (in this case used to identify and test causal relationships). Structural equations modeling – a “path analysis” may be shortly explained following way: “Path analysis is a method of measuring the influence of explanatory variables along each separate path in a system and finding the degree to which variation of a given effect is determined by each particular cause” (Teo, Lim & Lai 1999, p. 30). This approach allowed to calculate measures of fit for models reported in the paper, and made comparisons across those models.

There should be noted that presented analyses is exploratory in character. No exact hypotheses have been settled and tested in this case. The sets of descriptors for modeling influence of particular consumer decision-making style were chosen on the basis of author judgments coming from preliminary study using focus groups and analysis of correlations between styles from PCS and declared frequency of shopping in particular retail format.

Also for the declared frequency of shopping in particular retail format Cronbach's alpha has been calculated being equal 0.73. Because each format has been treated individually for modeling, there was no factor analysis performed in that case.

PROFILE OF CONSUMER STYLES – DESCRIPTIVE STATISTICS

Because used sample was representative to the Polish Internet users population and enough large to get relatively low sampling errors, descriptive statistics were calculated for each subscale of PCS (table 3), giving a reference point to further analyses.

Table 3. Descriptive statistics for PCS subscales for whole sample

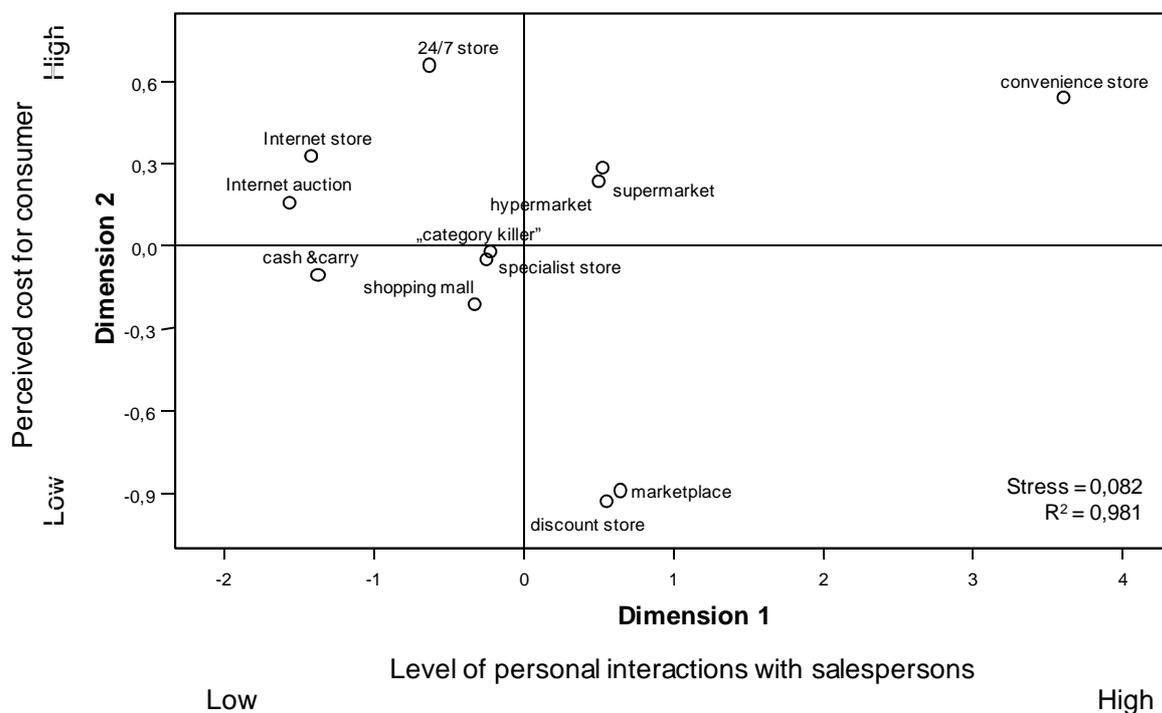
PCS subscale	Mean	Standard deviation	1st quartile	Median	3rd quartile
PERF	3.44	0.73	3.00	3.33	4.00
BC	2.84	0.77	2.33	3.00	3.33
NFC	2.95	0.93	2.33	3.00	3.67
RSC	2.69	0.97	2.00	2.67	3.33
PVC	3.42	0.74	3.00	3.33	4.00
IMP	2.75	0.66	2.33	2.67	3.33
CO	3.09	0.78	2.67	3.00	3.67
HBL	3.42	0.75	3.00	3.33	4.00
COMP	2.06	0.93	1.00	2.00	2.67

Averages, as well as median values, for results recalculated to initial code values ranging from 1 to 5 are in most case close to the midpoint of the scales. Only for compulsive decision-making style those measures are substantially lower. Standard deviation is highest for recreational style (RSC), as well as for perfectionist shopping orientation and compulsive dimension, being lowest for impulsive decision-making style.

PERCEPTION OF RETAIL FORMATS - RESULTS

For visual interpretation of perceived attributes of analyzed retail formats, one of forms of multidimensional scaling (the ALSCAL procedure) has been performed. Figure 1 contains graphical representation of 2 main dimensions got during this phase of research.

Figure 1. Perception map of retail types on the base of declared shopping frequency – multidimensional scaling approach (ALSCAL procedure, Euclidean distances)



Two-dimensional solution for this case fits the data very well. Stress value is lower than acceptable 0.1, and R^2 statistic is very high, exceeding minimum of 0.6 (Borg & Gronen 2005, p. 48) Dimensions in this case can be interpreted as:

- horizontal in figure 1, recognized as perceived level of personal interactions with the salespersons in particular retail format – dimension 1,
- vertical in figure 1, interpreted as perceived total cost for consumer in sense described by Peter & Olson (2002, p. 459-461) – dimension 2.

The highest level of personal interactions with the salespeople is perceived in convenience stores, where often shops are still using traditional type service or limited level of self-service). Shopping over the Internet creates the second pole for this dimension – buying in Internet stores and auctions requires mostly “machine-type” interactions with the Internet as a medium (using hyperlinks, forms, e-mails sent by auto responders etc.), and interactions “over the medium” with particular person are much rarer. Such interactions to be successful are performed mostly using instant messaging tools or phone calls. The most similar to both types of Internet shopping is cash & carry format – there are also not too many occasions to interact with sales force. Other formats are “in the middle” between described poles for this dimension.

In second dimension – recognized as perceived total cost for consumer as described by Peter & Olson (2002, p. 459-461) – are included following factors:

- perceived price level for particular retail format,
- physical effort of shopping, including travelling time and cost,
- time spent for shopping – in case of stores and Internet auctions this factor contains also the time of waiting for bought products delivery.

The lowest total cost for consumer is perceived for buying in discount stores and traditional marketplaces (bazaars) – probably because of perception that those places are cheap, and buying there gives opportunity to save money. On the other hand, the highest perceived total cost is for 24/7 type stores and convenience stores, mostly because of relatively higher price level.

We need to note, that in Poland discount stores are in most cases small comparing to other outlets, and localized often inside or close to larger clusters of inhabitants, so their usage patterns and assortment (in terms of product categories available – not brands) in some situations are more similar to typical convenience store than to the supermarket.

Relatively high position in this dimension of Internet shopping (both formats) is influenced by typically long time for product delivery, and possible problems with purchase handling, product returns ect., despite perception of low prices over the Internet and the most extensive assortment available in this channel. In this dimension buying over the Internet is similar to shopping in supermarkets and hypermarkets – average prices are probably connected with a perception of losing time during seeking products and standing in queues, giving mentioned position on the perception map.

CONSUMERS' DECISION-MAKING STYLES AND SHOPPING FREQUENCY – MODELS

Preliminary analyses gave some suggestions for expecting specific profiles of consumer decision-making styles for consumers preferring particular retail format.

Because of only slight, but statistically significant, differences on the level of particular decision-making styles for people preferring particular retail type, the results of investigation in this part are omitted. Instead, there is a more detailed description of the results of structural equation modeling (with standardized regression weights) for causal relationships between the score on some consumer decision-making styles from PCS and declared frequency of shopping in particular retail format (as a simplified measure of revealed preferences for choosing retail outlet types). Figures showing graphically particular models (from 12 estimated) and their paths including covariances between styles are not shown – this would need more space than is allowed for this paper. Because of exploratory character of this study we didn't expect to test any hypotheses regarding models, and the paths representing non significant influence of particular decision-making style on dependent variable were dropped from the model, “purifying” it from not significant paths, and helping to improve models' fit to the data.

Table 4. Path modeling results for particular decision-making styles explaining usage of particular store formats

a) Standardized regression weights

Decision making styles	Store formats											
	hyper-market	super-market	„category killer”	shopping mall	convenience store	discount store	specialist store	24/7 store	market-place	cash & carry	Internet store	Internet auction
PERF	0.065*	ns	ns	0.083**	ns	ns	ns	ns	ns	0.062*	0.064*	ns
BC	ns	ns	ns	0.064*	ns	ns	0.068*	ns	-0.062*	ns	ns	ns
NFC	ns	ns	ns	0.090*	ns	ns	ns	ns	ns	ns	ns	ns
RSC	0.090**	0.121***	0.106**	ns	ns	0.152***		-0.074*	0.074*		0.076*	0.105***
PVC	ns	-0.068*	-0.092**	ns	ns	ns	-0.129***	-0.202***	0.081**	-0.098***	-0.164***	-0.136***
IMP	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns
CO	ns	ns	ns	ns	0.121***	0.084**	ns	ns	ns	-0.067*	ns	-0.076*
HBL	ns	ns	ns	ns	ns	ns	ns	ns	-0.112***	ns	ns	ns
COMP	ns	ns	0.107***	0.187***	ns	ns	0.065*	0.133***	ns	0.216***	ns	ns

Notes:

ns - not significant * p<0.05 ** p<0.01 *** p<0.001

b) measures of fit

Measures of fit	Store formats											
	hyper-market	super-market	„category killer”	shopping mall	convenience store	discount store	specialist store	24/7 store	market-place	cash & carry	Internet store	Internet auction
Variance Explained – R²	0.012	0.019	0.042	0.078	0.015	0.030	0.028	0.055	0.027	0.066	0.040	0.039
c2/df (below 2 or 3 better)^a	10.152	0.600	3.062	3.663	n/a	3.600	3.001	3.062	0.998	3.203	5.932	1.902
P (not significant better)^b	0.001	0.439	0.047	0.056	n/a	0.058	0.050	0.047	0.407	0.022	0.003	0.149
GFI (above .9 is good fit)	0.994	1.000	0.997	0.999	1.000	0.998	0.997	0.997	0.998	0.996	0.994	0.998
AGFI (above .8 is good fit)	0.962	0.998	0.986	0.979	n/a	0.987	0.986	0.986	0.994	0.982	0.972	0.991
NFI (above .9 good fit)	0.586	0.971	0.979	0.991	1.000	0.905	0.948	0.981	0.969	0.936	0.859	0.951
RMSEA (.05 or less better)	0.093	0.000	0.044	0.050	n/a	0.049	0.043	0.044	0.000	0.045	0.068	0.029
PCLOSE (not significant better)^c	0.060	0.813	0.520	0.389	n/a	0.396	0.530	0.520	0.969	0.529	0.170	0.727

Notes:

^a “rules of the thumb” suggested by Carmines and McIver (1981, p. 80) or Byrne (1989, p. 55).

^b for larger samples it is hard to get significant p value (Jöreskog 1969, p. 200).

^c “p value” for testing the null hypothesis that the population RMSEA is no greater than .05 indicating close fit (Browne & Cudeck 1993).

In general, the models shown in table 4 are fitting the data well, but predictive value of them is very low – their R^2 values, especially for hypermarket, supermarket and convenience store are below 0.02 for each case. The highest R^2 had models for shopping mall and cash & carry store formats (0.078 and 0.066 respectively). Low R^2 values are suggesting that our models important descriptors are omitted (which was expected), but quite good fit of all models confirms the existence of causal relationships between shopping behavior and profile of consumer styles.

Preference for buying in hypermarkets is caused by higher level of recreational/hedonistic shopping orientation, and higher level of perfectionism. People more often buying in supermarkets are also recreational shopping-oriented, but also less price-value conscious. More frequent buying in specialized large stores (so called “category killers”) is caused by the same styles than shopping in supermarket, with addition of the positive influence of compulsive decision-making style.

Shopping malls attract consumers that are more compulsive. They are higher on perfectionism, more novelty-fashion conscious and brand conscious.

Frequent shopping in convenience stores is caused only by one style: the confusion from overchoice – not so wide assortment and small infrastructure attracts such consumers to this store format. From the same reason people sensitive on overchoice prefer buying in discount stores, also higher recreational shopping orientation is connected with references of choosing discounters.

Key characteristic of consumers liking and buying more often in specialist stores is low price-value consciousness, higher brand consciousness, and higher compulsiveness. 24/7 stores opened non stop are attracting people more compulsive, less price-value sensitive (sometimes of seriousness of needs to buy something), and less recreational-oriented.

Buying on traditional marketplace/bazaar is likely performed by consumers price-value sensitive, recreational-oriented during shopping, rather not habitual-brand loyal, and not brand conscious.

Cash & carry type outlets are perceived well by compulsive consumers, perfectionists seeking always best products, people less sensitive on price-value issues, as well as not easily confused by overchoice.

Two consumer decision-making styles are predictors of Internet shopping – this means that consumers less price-value oriented and more recreational-oriented are likely to shop more frequently. Additional style connected with buying in Internet stores is brand consciousness – more products of well-known brands is easier available in Internet stores than in conventional retail. Consumers preferring Internet auctions are less likely to be confused by overchoice – large number of items offered on such platforms not confuses them, also using searching tools minimizes the information overload.

CONCLUSION

As noted before this research gave some answers for similarities and differences between retail formats, and also for connections between consumers' decision-making styles and store format choice.

In our research some retail formats are perceived as similar: marketplaces and discount stores, hypermarkets and supermarkets, Internet shops and Internet auctions, while convenience stores seem to be very distinct in comparisons to other formats.

From nine consumer decision-making styles analyzed, eight influenced significantly frequency of shopping in at least one retail format. In two cases: recreational/hedonistic shopping consciousness and price-value consciousness eight from twelve formats are affected.

Level of recreational/hedonistic decision-making style significantly influencing buying in discount stores, supermarkets, hypermarkets, and so called “category killer” specialized stores, as well as in Internet auctions, Internet stores and marketplaces (having positive impact on frequency of shopping). However, for 24/7 type stores this style has negative impact, and – surprisingly – there is no relationship between this style and shopping in shopping malls.

The degree of price-value consciousness had negative impact for shopping in 24/7 stores, Internet stores and Internet auctions, specialist stores, “category killers” supermarkets, and cash & carry places. Only buying in marketplaces was positively connected with mentioned decision-making style.

Compulsive orientation, connects significantly with shopping in cash & carry places (maybe bulk quantities are teasing compulsive shoppers), shopping malls (as expected), 24/7 stores (probably giving “instant relief” for consumers addicted to shopping), “category killers” and specialist stores.

High sensitivity to be information overloaded because of overchoice was present for convenience stores and discounts. In opposite way this style affected buying cash & carry, as well as on Internet auctions.

High perfectionism increases frequency of shopping in shopping malls, hypermarkets, cash& carry and Internet stores, while having more pronounced brand-conscious shopping orientation connects positively with buying in specialist stores, shopping malls (easier to buy better brands), and negatively with buying on traditional marketplaces.

Novelty-fashion conscious orientation, as well as habitual brand-loyal one affected only shopping in shopping malls and marketplaces respectively. Impulsive orientation was not included in any model – there is a possibility that low reliability of that construct is the reason of such situation.

The effects of this research should have several practical implications. Firstly, knowledge of the nature of consumer decision-making style profiles leading to preferences for retail format choice should lead to better marketing planning, positioning and other merchants' decisions. Secondly, the research results should give a possibility to explore similarities and differences between different store formats using gathered data. Thirdly, this study should have also valuable suggestions for e-commerce practitioners connecting some decision-making styles with possible threats and difficulties in e-commerce adoption: fraud, getting not-original products, information overload, too high prices (adding delivery costs), and lack of enjoyment.

LIMITATIONS

Unfortunately, this study has also some important limitations.

Firstly, a single-item measure for shopping behavior in terms of frequency of buying, as a measure of revealed preferences is too simple – we need to develop a better measure for such thing. Also results from this study have low level of generalization possibility to the other cultures and retail structures – comparative international study should be done.

Not considering demographic factors might influence the results – because of it and also from previous reason there is a need to redesign measures and sample structure (for instant trying to replicate results on the sample which is less diversified in terms of age, income etc.).

Incomplete styles catalog – in PCS, there is a lack of style including some ecological shopping orientation – developing items for such style, and test them for possible inclusion to the adapted by authors version is another issue.

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