

Predictors and effect of consumer price sensitivity: The case of Croatia

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The main purpose of this paper was to explore the influence of demographic variables and personal factors on the consumer price sensitivity, as well as the impact of price sensitivity on the word-of-mouth sending information. The research was carried out on a representative sample of one thousand Croatian consumers. The data was analysed with a variety of statistical methods, including the exploratory and confirmatory factor analyses and structural equation modelling (SEM). The results show that some demographic factors (gender and education) and researched personal factors (attitudes towards advertising and shopping enjoyment) directly influence consumer price sensitivity, which positively influences word-of-mouth communication. Besides theory contributions, the research results offer some practical marketing implications. Namely, the marketing experts (companies) can better understand the predictors and effect (outcome) of consumer price sensitivity, and its role for the marketing strategy. At the end, the paper discusses research limitations and provides some future research suggestions.

Keywords: price sensitivity, demographic characteristics, attitudes towards advertising, shopping enjoyment, word-of-mouth communication.

JEL codes: M21, M30, M31.

Introduction

Price sensitivity can be defined as the range within which the consumers perceive prices, tolerate them, and respond to changes or differences in prices with respect to products and services (Irani-Hanzaee 2011; Zeng et al. 2011; Wakefield–Inman 2003). Due to its influence on sales and profitability, it is an important concept for marketing theory and practice (Ramirez–Goldsmith 2009). Price

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perception can be determined by both rational and psychological factors (Kurtulus–Okumus 2010). In general, the consumer's individual characteristics, personality and attitudes or demographics, influence the price value perceived by the consumer (Otaibi–Yasmeen 2014). According to Irani and Hanzae (2011), price strategies, dealing with market and price elasticity, are present in many researches, but little attention is paid to researching the consumer's perspective and perception. This represents a strong motive for researching the price sensitivity based on the insights from the consumers. Consumer price sensitivity provides important information and the response needed for strategic and tactical decisions, such as, segmentation, pricing, positioning and other marketing activities (Kurtulus–Okumus 2010; Kaul–Wittink 1995). Since the main goal of achieving the maximum profit is also in the business focus, both researchers and managers are interested in exploring consumer price sensitivities. In addition, recent insights (Neff 2013) indicate that price sensitive shoppers, mostly perceived as unprofitable due to their brand switching, can be very brand profitable consumers. Namely, marketing analytics show that price sensitive consumers come from all demographic groups, can be more loyal, and spend more money than less price oriented buyers. Moreover, it seems that price sensitivity impacts all types of products (Dunnhumby 2013), which broadens the relevance of examining the role of price sensitivity construct with respect to its application.

Numerous studies have examined various antecedents of price sensitivity, such as: product involvement, consumer innovativeness, perceived brand parity, attitudinal brand loyalty (Goldsmith et al. 2010; Ramirez–Goldsmith 2009), the effect of advertising (Kalra–Goodstein 1998; Kaul–Wittink 1995), subjective shopping values, objective purpose of use and shopping companions (Nam–Lee 2009), perceived quality, satisfaction, and perceived value (Zeng et al. 2011). Prior research mostly captured the importance of prices³ for the purchase

³ Focusing intensively on the purchase process, consumers obtain greater knowledge of the product's value, thus their price sensitivity increases (Rosa–Rondan 2011).

behaviour, its importance for the consumers' knowledge acquirement, attention, use of information, price comparisons and customer satisfaction. However, there are no detailed studies examining the commercial and socio-demographic predictors of the price (Rosa–Rondan 2011). Based on the previously mentioned, and keeping the consumer in the focus, there can be many factors influencing price sensitivity, thus supporting the need for researching the personal predictors of consumer price sensitivity, as well as the role of demographics.

Furthermore, various cultures and demographic variables can cause differences in price perceptions (Kurtulus–Okumus 2010). When it comes to the variety of cultures/markets, American and North European consumers are perceived as less price sensitive, while Italian, Spanish, German and Russian ones are seen as high price sensitive consumers (Arink et al. 2010). The research of Croatian consumer behaviour (Ipsos 2013) revealed some changes and trends in the buying behaviour. Specifically, a general decrease in consumer trust was established, which, among other effects, led to a greater consumer sensitivity. Croatian consumers seem to be more cautious and search for lower prices, and discount sales when making decision regarding the retail place. This suggests that retailers can orient toward attracting the price sensitive consumers and/or encouraging price sensitive behaviour as a form of their marketing strategy.

The research of price sensitivity contributes to the economic theory assumption of consumers intensively paying attention to the prices of the products which they purchase. According to Rosa and Rondan (2011), many consumer behaviour theories directly or indirectly tackle the premises of consumers being aware of prices or evaluating the prices. It is worth noting that identifying price sensitive consumers, with respect to relevant antecedents, will enable marketing experts to better understand and design their marketing communication, as well as to manage the marketing mix and point-of-purchase optimizing the elements of promotion and price.

The existing literature reveals the contradictory results, scarcity and non-existence of detailed approach (e.g. in terms of demographics,

WOM communication), the lack of research (e.g. attitudes towards advertising), as well as the unexplored antecedents and outcome when considering relatively underdeveloped post-transitional economies. Therefore, the main purpose of this paper is to assess demographic and personal predictors of price sensitivity, as well as its outcome in order to gain a better understanding of such relationships and their implications. The analysed personal factors and their relation to price sensitivity reflect the consumers' beliefs toward certain elements of the marketing mix, such as components of price and promotion/communication. Hence, this research also contributes to pricing and consumer behaviour theory, thus providing the repercussions for both science and practice. Research results can be useful for marketing managers in terms of marketing strategy development, including segmentation, positioning, and marketing communication.

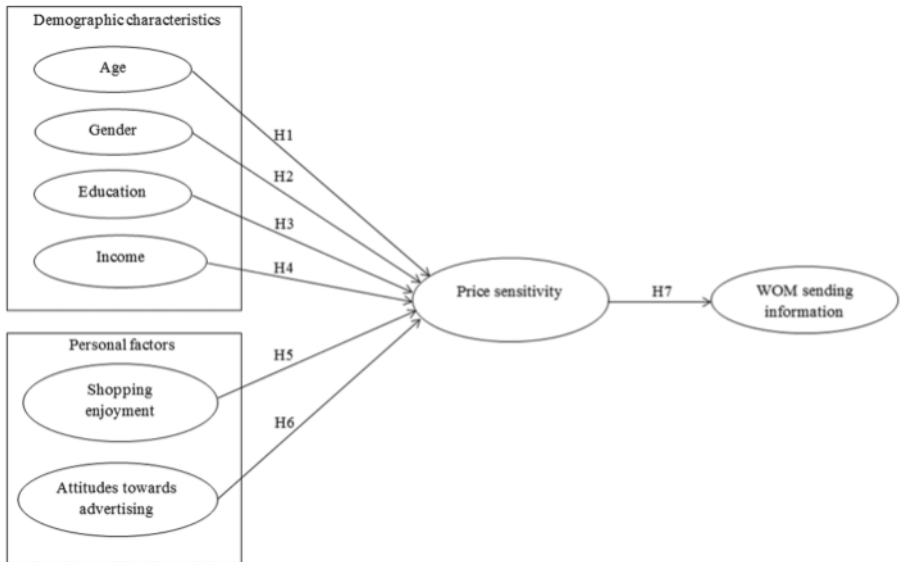
This paper consists of six sections. Following the introductory part, the literature overview and hypotheses are presented in the second section. The third section deals with research methodology, whereby the fourth section provides the analysis of the research results. Finally, the discussion of the results can be seen in the fifth section, while the conclusions, entailing the research limitations and future research suggestions, are presented in the sixth section of this paper.

Literature overview and hypotheses development

This paper focuses on the examination of demographic and personal predictors of the consumer's price sensitivity and its influence on WOM sending information. The conceptual model is presented in Figure 1.

Demographics and price sensitivity

Although rare, studies examining the influence of demographics on price sensitivity indicate contradictory results; either significant relationships or no significance at all. However, researchers suggest that demographics should be in the focus of further research (Dunnhumby 2013; Rosa–Rondan 2011; Hsieh–Chang 2004). Recent insights (Neff 2013) indicate that, unlike it was thought in the past, price sensitive



Source: authors' own design

Figure 1. Conceptual model of predictors and outcome of price sensitivity

consumers might come from all demographic groups. This provides a strong basis for researching the price sensitivity construct with respect to demographic predictors.

Age. Prior research confirms that age influences consumer behaviour (Akhter 2003). Namely, older consumers search for a safer approach in decision making; are more alert and price sensitive (Chuang–Tsaih 2013; Venkatesh et al. 2012; Akhter 2003). Such consumers usually have more free time and spend more time shopping, and visiting multiple stores (Coil et al. 2007; Hoch et al. 1995). However, some opposite findings (e.g. Ding 2003) indicate that younger consumers exhibit the characteristics of high price sensitivity. In addition, some researchers (Rosa–Rondan 2011) stress the importance of the relationship between age and income, noting that since income might increase as getting older (e.g. due to professional stability and less family responsibilities), consumers might attach less importance to

price. Considering the existing results, contradictions in findings and the possibility of reaching new/additional insights, the following hypothesis is proposed:

H1: Older consumers are more price sensitive than younger consumers.

Gender. Economic and business literature review shows that a lot of emphasis was put in researching the gender role. The studies indicate that women are motivated by non-economic goals, are not so prone to risk taking behaviour (Hinz et al. 1997), and are not so confident buyers (Lundeberg et al. 1994). Furthermore, past literature suggests that, besides the greater price knowledge, women are more price sensitive, that is, more responsive to price changes, attach more importance to prices than men, ascribing this to the traditional role of women being responsible for the household budget and finding the better value for money options (Mitchell 2012; Venkatesh et al. 2012; Arink et al. 2010; Langer 2009; Rosa–Rondan 2011; Ding 2003).

On the other side, various researchers (Chuang–Tsaih 2013; Chen–Hu 2012; Rooney et al. 2005; Huang et al. 2004) argue that male consumers are more price sensitive than females. Moreover, according to some researchers (Rosa–Rondan 2011), social changes enable women and men to equally participate in work, traditional shopping and household activities. Considering the contradictions in the existing findings (the majority of research suggesting that female consumers are more price sensitive), as well as the possibility for gaining the new/additional insights in terms of the researched context/environment, the following hypothesis is proposed:

H2: Female consumers are more price sensitive than male consumers.

Education. Prior research (Akhter 2003) indicates that education influences the consumer's search for information, product evaluation and product information usage suggesting that well-educated consumers are more inclined toward these activities. With respect to price sensitivity, past research results are not unanimous. Namely,

according to some findings (Hoch et al. 1995; Punj 2011; Cooil et al. 2007; Rosa–Rondan 2011), high-educated consumers are more involved in information gathering and processing before making purchasing decision, have a higher capacity for information processing, which lowers the importance of price, and thus are less price sensitive. Furthermore, Zhang et al. (2002) determined a greater price sensitivity level for workers and students (as lower educated consumers) relating this finding to their lower income. On the other side, rare studies indicate that well-educated consumers might also be high price sensitive (Chuang–Tsaih 2013). Based on the contradictory nature of discussed results, and inclining towards the majority of findings, the following hypothesis is proposed:

H3: Less-educated consumers are more price sensitive than the well-educated consumers.

Income. High income consumers might be less prone to information gathering and evaluation, which suggests the negative relationship between the income and information searching process (Ward–Lee 2000). According to relevant literature, income influences consumer behaviour, whereas low-income consumers are perceived as economical shoppers (Anić–Mihić 2015), and are more price sensitive (Chuang–Tsaih 2013; Langer 2009; Hoch et al. 1995; Sirvanci 1993) than high-income consumers. Furthermore, some studies found no relationship between income and price sensitivity (Dunnhumby 2013). A research based on the role of leaflets (Monitor 2009) shows that the Croatian lower-income households are continuously paying attention to prices, whereby recession is forcing also higher-income consumers to change their consumption behaviour patterns. Taking into consideration the lack of an agreement and the majority of findings (indicating low-income consumers as more price sensitive), the following hypothesis is proposed:

H4: Low-income consumers are more price sensitive than high-income consumers.

Shopping enjoyment and price sensitivity

Shopping enjoyment refers to a leisure activity entailing psychological returns before, during and after the shopping experience (Wong et al. 2012). According to some findings (Seock–Bailey 2008; Rosa–Rondan 2011), consumers who perceive shopping as a leisure activity are inclined to spend more time shopping; they shop with a higher attention devoted to details, which can lead to often price comparison, as well as to appreciating the price component as an important element of their buying decision process. Moreover, hedonism, as a fundamental aspect of the consumer's satisfaction, might be in relationship with the best purchase search and value for money options (Rosa–Rondan 2011).

In general, consumers are highly motivated to find the "best", "better" or "lower" prices as determinants of shopping effectiveness (Kwon–Kwon 2007). The theory of consumption values (Punj 2011; Wakefield–Inman 2003) suggests that consumers consider and acquire both hedonic (enjoyment of shopping) and functional values (e.g. finding the best product fit) while shopping. The bargaining perspective is another important aspect of shopping enjoyment and price sensitivity relationship. Namely, consumers who prefer bargain hunting enjoy shopping; prefer special offers and, as such, are prone to price sensitivity (Gazquez-Abad–Sanchez-Perez 2009; Irani–Hanzaee 2011). Hence, it can be expected that consumers who enjoy shopping will be highly price sensitive. Thus the following is assumed:

H5: There is a significant positive relationship between shopping enjoyment and price sensitivity.

Attitudes towards advertising and price sensitivity

Positive advertising impressions can affect attitudes towards product or brand, and eventually influence consumers to purchase that product or brand (Levy–Gendel-Guterman 2012). In addition, the attitudes towards advertising impact the usefulness of the specific ads (Mehta–Purvis 1995). As a medium of attitudes' creation, advertising plays an important and profitable role when it comes to influencing consumer price sensitivity and impacting the elasticity of demand with respect to advertised products or services (Erdem et al. 2008).

Prior research argues that advertising influences price sensitivity; however, the results are contradictory. Some results show positive, other show negative relationship (according to Erdem et al. 2008; Kaul–Wittink 1995), while others indicate the non-existence of an advertising and price sensitivity relationship (Capella et al. 2008). To the best of our knowledge, no direct relationship between the consumers' attitudes towards advertising and price sensitivity was found; however, it can be assumed. Namely, it seems that consumer price sensitivity increases when consumers are exposed to retail advertising (Goldsmith et al. 2010; Zhang 2009; Kalra–Goodstein 1998; Kaul–Wittink 1995; Zhao et al. 2010; Kanetkar et al. 1992). Recent insights (Dunnhumby 2013) indicate the relationship between the consumers' responses to online and traditional media and price sensitivity. This suggests that the notion of consumers making buying decisions based on price can help marketing managers with examining and understanding the role of advertising for the price sensitive consumers. Furthermore, there are findings indicating that positive attitudes towards sales promotions are more characteristic for price conscious consumers (Gazquez-Abad–Sanchez-Perez 2009). Based on previous discussion and considering the possibility of reaching new findings, the following hypothesis is suggested:

H6: There is a significant positive relationship between the favourable attitudes towards advertising and price sensitivity.

Price sensitivity and WOM sending information

The most researched outcomes of price sensitivity were loyalty (Hansen–Singh 2008; Chen–Hu 2012), perceived value, and purchase intention (Chen–Hu 2012). WOM communication represents an important market phenomenon considered to be a more influential medium for the consumers' product evaluations than the traditional communication sources, such as advertising (Kempf–Palan 2006). This emphasizes the importance of WOM for marketing practice, especially since it is the source of information most trusted by the consumers (Staff 2016; Keller 2013; Rees 2013).

Prior literature suggests that price sensitive consumers might be prone to WOM information spreading (Ozcan 2004). Choi and Kim

(2007) argue that the consumer's perception of the value for money (e.g. sales/discounts) and high price awareness (especially if the savings are expected) positively influence the consumer's willingness to recommend the store to others. Contrary to this, Zeng et al. (2011) indicate that less price sensitive consumers may exhibit a tendency towards the positive WOM information sending. Xia et al. (2004) argue that price fairness perception can result in negative emotions, thus generating negative WOM communication.

Considering the existing findings, contradictions, significance of WOM communication as a promotional tool, as well as the possibility of gaining additional insights in the case of Croatia, the following hypothesis is formulated:

H7: There is a significant positive relationship between price sensitivity and WOM sending information.

Research methodology: sample, data collection and measurement scales

A survey was carried out by a specialised market research agency. For the purpose of ensuring the sample representativeness the probability sample, that is a random stratified sample, according to the properties of the size of 21 Croatian counties and structure of the estates in a particular county, was employed. Hence, two-stage proportional stratification was used, whereby all groups/strata retained the proportions that they have within the researched population. The units within each group were assessed randomly. The nationally representative sample, consisting of 1000 respondents, was based on the Croatian population census (Croatian Bureau of Statistics 2011). Besides sample representativeness, this type of sampling approach ensures higher statistical precision as well.

Consumers' attitudes were evaluated using the highly structured questionnaire (Likert scale, 5 degrees). Demographic data were included in the second part of the questionnaire. The sample structure is visible in Table 1.

Table 1. Sample structure

Characteristics	Absolute values (N=1000)	Relative values (%)
Gender		
Female	537	53.7
Male	463	46.3
Age		
18-19	53	5.3
20-29	211	21.1
30-39	153	15.3
40-49	166	16.6
50-59	171	17.1
60 or more	246	24.6
Education		
Unfinished primary school	4	0.4
Primary school	41	4.1
Skilled worker	14	1.4
Secondary school	626	62.6
Highly-skilled worker	22	2.2
College	139	13.9
University	136	13.6
Spec., M.Sc., Ph.D.	17	1.7
No answer	1	0.1
Income (kn)		
up to 1 000	11	1.1
up to 2 000	49	4.9
up to 3 000	82	8.2
up to 4 000	109	10.9
up to 6 000	203	20.3
up to 8 000	151	15.1
up to 10 000	135	13.5
up to 13 000	80	8.0
up to 16 000	52	5.2
up to 20 000	29	2.9
> 20 000	17	1.7
No answer	82	8.2

Source: authors' own research

The measurement items were adapted from the variety of measurements scales. Price sensitivity items were adapted from Lichtenstein et al. (1993), Sproles–Kendall (1986), and Sproles–Sproles (1990). The consumers' attitudes towards advertising were measured with items adapted from Pollay–Mittal (1993) and Mehta–Purvis (1995). The items adapted from Dawson et al. (1990) and Lumpkin (1985) were

used to measure the shopping enjoyment construct. For testing WOM sending information the items were taken from Mowen et al. (2007).

Research results

Outliers, normality of distribution and multicollinearity

Univariate and multivariate outliers were identified and removed from further analysis (N=960). Skewness and kurtosis indexes were assessed for univariate normality of distribution, whereby all values were adequate. The correlation analysis was used to test the bivariate multicollinearity. The analysis showed that there is no existence of multicollinearity among the variables. Namely, all absolute values were acceptable ($R^2 < 0.90$), as well as VIF (< 10) and Tolerance (> 0.10) (as suggested by Pallant 2011).

Considering main researched characteristic of price sensitivity (mean=3.43, st. dev=0.94, variance=0.89), it can be said that 615 respondents (64.1%) are price sensitive. Calculating the margin of error (MOE) it can be concluded with 95% confidence that 64.1% of all respondents are price sensitive plus or minus 3%. The range of 95% confidence interval is 3.4 ± 0.03 .

Reliability of constructs (Cronbach's alpha)

The empirical data was analysed with SPSS 23 software package and AMOS. At this stage, the reliability of the used measurement scales was tested with Cronbach's alpha, alpha-if-deleted and item-total-correlation indicators. As it can be seen from Table 2, all measurement scales show the adequate reliability.

Table 2. Reliability of constructs

Construct	Reliability (Cronbach's alpha)
Shopping enjoyment	0.87
Attitudes towards the advertising	0.80
Price sensitivity	0.79
WOM sending information	0.86

Source: authors' own research

Exploratory factor analysis

Prior to factor extraction, the data was assessed for the adequacy. For this purpose, two justification tests were used: the Kaiser-Meyer-Olkin (KMO) indicator and Bartlett's test of sphericity. Table 3 shows that the Kaiser-Meyer-Olkin indicator is between 0 and 1; it is higher than 0.5 (Pallant 2011), and Bartlett's test of sphericity is significant (p value <0.05) indicating the appropriateness of data for conducting the exploratory factor analysis.

Table 3. Data adequacy

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy		.884
Bartlett's Test of Sphericity	Approx. Chi-Square	7038.056
	df	120
	Sig.	.000

Source: authors' own research

The exploratory factor analysis was performed using the Varimax raw method of orthogonal rotation, and the principal component analysis. Eigenvalue of each factor was set to >1 and the factor loadings to min. 0.4. Four factors were extracted explaining 67.3% of the variance (Table 4).

The exploratory factor analysis indicates that measurement scales exhibit the characteristics of convergent and discriminant validity, having the high factor loadings on the intended factors, and low factor loadings on other factors.

Confirmatory factor analysis (CFA)

Confirmatory factor analysis (CFA) was used for the additional assessment of the measurement scales' convergent and discriminant validity, as well as unidimensionality. For this purpose, the measurement model was created according to relevant principles, such as: each manifest variable loaded on one latent variable, had its own metric, the error terms were independent and the factors correlated (<0.85), as suggested by Kline (2011). The confirmatory model goodness-of-fit values are visible in Table 5, the CFA results in Table 6, and the discriminant validity results in Table 7.

Table 4. Factor structure

Items	Factors			
	Shopping enjoyment	WOM sending	Attitudes towards advertising	Price sensitivity
I like to watch advertisements.	.135	.065	.784	.166
The advertising is a good/useful source of information about products and services.	.168	.209	.697	.051
The ads offer true picture about advertised products or services.	.116	.190	.746	.086
Watching/listening to ads is fun and recreational.	.269	.144	.786	.131
In general, I think buying is fun.	.775	.172	.194	.075
For me, buying is relaxation.	.823	.206	.193	.112
I often visit shops even if I do not intend to buy anything.	.799	.155	.135	.164
I like to visit shopping malls.	.786	.181	.197	.171
I shop at sales/discounts whenever I have such opportunity.	.208	.160	.101	.681
I usually visit more shops to find the lower price products.	.171	.117	.075	.793
I often check the prices in shop, even for the cheaper products.	.093	.155	.116	.793
I pay great attention to prices while shopping.	.009	.036	.108	.759
I like to help other people by giving them information about certain products.	.059	.731	.145	.118
Other people usually ask me for information about products or sales.	.218	.819	.158	.132
My friends think of me as of good information source regarding the products or sales.	.216	.820	.152	.154
I often inform others about new products or brands.	.245	.800	.177	.105

Source: authors' own research

Table 5. Measurement model goodness-of-fit

Fit index	GFI	AGFI	NFI	CFI	RMSEA
Value	0.96	0.94	0.94	0.96	0.04

Source: authors' own research

Table 6. CFA results

Factor/items	Factor loading (β)	Composite reliability (CR)	Average extracted variance (AVE)
Shopping enjoyment		0.85	0.60
In general, I think buying is fun.	0.71		
For me, buying is relaxation.	0.81		
I often visit shops even if I do not intend to buy anything.	0.76		
I like to visit shopping malls.	0.80		
Attitudes towards advertising		0.81	0.52
I like to watch advertisements.	0.73		
The advertising is a good/useful source of information about the products and services.	0.61		
The ads offer true picture about advertised products or services.	0.67		
Watching/listening to ads is fun and recreational.	0.85		
Price sensitivity		0.80	0.50
I shop at sales/discounts whenever I have such opportunity.	0.66		
I usually visit more shops to find the lower price products.	0.77		
I often check the prices in shop, even for the cheaper products.	0.75		
I pay great attention to prices while shopping.	0.61		
Word-of-mouth		0.86	0.62
I like to help other people by giving them information about certain products.	0.61		
Other people usually ask me for information about products or sales.	0.84		
My friends think of me as of good information source regarding the products or sales.	0.85		
I often inform others about new products or brands.	0.82		

Note: Thresholds for CR and AVE are 0.7 and 0.5 respectively.

Source: authors' own research

Table 7. Discriminant validity

Factors	Shopping enjoyment	Attitudes towards advertising	Price sensitivity	Word-of-mouth sending information
Shopping enjoyment	0.77			
Attitudes towards advertising	0.46	0.72		
Price sensitivity	0.36	0.32	0.71	
Word-of-mouth sending information	0.47	0.42	0.35	0.80

Note: Diagonal bold numbers represent square roots of AVE (average extracted variance) that need to be higher than the inter-construct correlations as a proof of discriminant validity.

Source: authors' own research

Confirmatory analysis results show that measurement scales exhibit the characteristics of convergent and discriminant validity, and unidimensionality.

Structural equation modelling (SEM)

Structural equation modelling (covariance based) was used to test the hypothesized relationships that were supported based on the significance and corresponding direction. Parameters were estimated using the maximum likelihood (ML) method. The structural model fit values are visible in Table 8, and the standardised structural coefficients in Table 9.

Table 8. Structural model goodness-of-fit

Fit index	Value
GFI	0.95
AGFI	0.93
NFI	0.93
CFI	0.95
RMSEA	0.05

Source: authors' own research

Table 9. Standardised structural coefficients

Relationship	Standardised structural coefficients	p-value
H1: Age → Price sensitivity	-0.009	0.792
H2: Gender → Price sensitivity	-0.125	0.000
H3: Education → Price sensitivity	-0.093	0.005
H4: Income → → Price sensitivity	-0.007	0.833
H5: Shopping enjoyment → Price sensitivity	0.258	0.000
H6: Attitudes towards advertising → Price sensitivity	0.273	0.000
H7: Price sensitivity → WOM sending information	0.412	0.000

Source: authors' own research

The SEM results show that demographic variables and personal characteristics influence consumer price sensitivity, which is positively related to WOM sending information. Namely, gender and education are related to consumer price sensitivity, while age and income do not play significant roles for price sensitivity. Furthermore, both personal factors, shopping enjoyment and attitudes towards advertising, positively influence consumer price sensitivity. Hence, price sensitive consumers are females and lower-educated consumers who enjoy shopping and have positive attitudes towards advertising. These price sensitive consumers are more prone to positive WOM information spreading.

Discussion

The purpose of this research was to examine the influence of demographic variables and personal characteristics on price sensitivity, as well as the impact of consumer price sensitivity on WOM sending information. With respect to demographic variables, the results show that gender and education represent relevant predictors of price sensitivity, unlike age and income. This led to the acceptance of hypotheses H2 and H3, while hypotheses H1 and H4 were not supported. Findings about gender are in accordance with some previous studies (e.g. Mitchell 2012; Venkatesh et al. 2012; Arink et al. 2010; Langer 2009; Rosa–Rondan 2011; Ding 2003), as well as the results regarding the education (e.g. Rosa–Rondan 2011; Punj 2011; Zhang et al. 2002).

Unexpectedly, the results show that income does not significantly influence price sensitivity. The reason for such result can be sought within the notion (Monitor 2009) whereby the recession forced higher-income consumers to change their buying behaviour patterns. The shift in shopping patterns, connected to income and recession, might also be the reason for the non-significance of age as a predictor of price sensitivity, which is in line with the results of Dunnhumby (2013) as well as the interdependence of age and income as explained in the theoretical part (e.g. Rosa–Rondan 2011). The results regarding demographics offer additional insights contributing to the consumption values theory and new findings within the Croatian market.

With respect to personal characteristics, the results show that shopping enjoyment and the consumers' attitudes towards advertising positively influence consumer price sensitivity. Therefore, the hypotheses H5 and H6 were supported. The results regarding shopping enjoyment are in accordance with some theoretical findings (e.g. Rosa–Rondan 2011; Gazquez-Abad–Sanchez-Perez 2009; Irani–Hanzaee 2011; Seock–Bailey 2008) and can be perceived as new insights, especially from the perspective of researched market. Moreover, a determined relationship between the consumers' favourable attitudes towards advertising and price sensitivity represents a new finding.

Finally, it was established that price sensitive consumers are prone to positive WOM sending; therefore, hypothesis H7 was accepted. Although prior literature indicates some contradictions, this result is in line with some past findings (e.g. Choi–Kim 2007; Ozcan 2004) and greatly enriches the existing knowledge base.

Conclusion

In addition to scientific contributions, this research has several practical implications. Namely, the marketing experts can better understand the predictors and outcome of price sensitivity, which represents an important aspect of consumer behaviour in terms of strategic and tactical operations/decisions, and consumer profiling. Research revealed that the Croatian price sensitive consumer is female

and lower-educated, who enjoys shopping and has favourable attitudes towards advertising. Moreover, such a price sensitive consumer is prone to WOM information sending.

Considering research results, marketing experts should pay attention to the role of demographics and personal characteristics when optimizing the marketing mix elements (price, promotion and product). In a highly competitive market, characterized by recession, companies should strive to adapt their marketing strategy to price sensitive consumers by appealing to economic benefits (e.g. lower prices, discounts, sales, savings, and value for money) as a way of eliciting the positive WOM information sending.

Advertising efforts should rely on rational appeals, with an aim of creating the positive attitudes towards the advertised product/service/store, especially due to the present consumer decrease in trust. Besides the economic/utilitarian benefits, marketing communication should include the emotional appeals of fun and enjoyment, thus targeting those consumers who perceive shopping as bargain hunting. Moreover, the attention should be paid to the point-of-purchase, which represents an excellent environment for bargain hunting oriented consumers. All aforementioned aspects enable companies to: differentiate the marketing mix based on advertising and price promotions, attract price sensitive consumers, and encourage price sensitive behaviour as well.

With respect to the mentioned contributions, there are some research limitations. By conducting the research during the period of economic recession, there is a possibility of over-emphasized price sensitivity. Hence, Croatian consumers might be perceived as overly price sensitive. It might be helpful to repeat the research in the future to also see the potential importance of the relationships that were not confirmed, as well as the intensity of the significant influences.

Future research on price sensitivity could encompass more personal variables or categories of factors (e.g. personal and situational elements). It might be insightful to examine the existing or enriched model in terms of possible variations of consumer price sensitivity across diverse product groups/industries or to conduct a cross-cultural

research on differences in consumer price sensitivity arising from the cultural context. Moreover, further research might capture the chain of effects, that is, the influences among the researched antecedents (e.g. education-income, gender-shopping enjoyment), as well as the mediating concepts, such as involvement or buying frequency.

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