

How Students as Consumers Learn Information about New Products

Jelena Šišara

Polytechnic in Šibenik, Croatia

Divna Goleš

Polytechnic in Šibenik, Croatia

Abstract

The importance of understanding how consumers gather and evaluate information about the new products is essential for providers. This paper considers the student population as consumers and attempt to determine where students as consumers learn information about new products and their attitudes toward different sources of information. Research was conducted at the Polytechnic in Sibenik and comprised students of all majors and years of study. Results indicated that students as consumers utilize a wide variety of information sources to learn about new products. Thus gender, as a major social category, age and other determinants of consumer behaviour were also considered. It concludes with some important marketing implications.

Keywords: consumers, new products, consumer behaviour, marketing, innovation, development

JEL classification: M39

Introduction

The theoretical basis of household consumption research we found in the papers of the neoclassical theory which attempts to explain consumer behaviour. Keynes gave special theoretical contribution to the development of dynamic and contemporary theories of consumers (Denona Bogović, 2002.).

Understanding of consumer behaviour and decision making process is crucial for firms in order to make better decisions by marketers within the context of marketing systems (Bettman, 1970.). The issue of consumer behaviour is multidisciplinary rather than interdisciplinary and it should be understood as a discipline creating knowledge on different types of human behaviour that are ultimately related to the consumption of products and services (Macinnis, Folkes, 2010.). Contemporary research on consumer behaviour considers a wide range of factors influencing the consumer, and acknowledges a broad range of consumption activities beyond purchasing. These activities include; need recognition, information search, evaluation of alternatives, the building of purchase intention, the act of purchasing, consumption and finally disposal (Bray, 2008).

Information gathering process differs according to the age of the consumer (John et al, 1986.). Consumers' age traditionally has been considered an important basis for market segmentation. (Ward et al., 1977.).

Consumers are continually making choices among products (Nelson, 1970.). But it is not the same whether it is a new product or those who are already familiar to them. Product familiarity refers to prior knowledge of the brands within a product category, although all consumers start as novices at some point before their first purchase in a product class (Johnson et al., 1984.). New product development has

long been recognized as one of the corporate core functions to be competitive on an increasingly competitive global market. Particularly for the companies with short product life cycles, it is important to develop new products and new product platforms that fulfil reasonable demands on quality, performance, and cost quickly and safely (Kahraman, et al., 2007.). Regarding this findings it is understandable that nowadays, the development of new products is higher than ever before. Considering fast array of new products it is important to know how consumers get informed about them, since new products are by definition like nothing they have seen or experienced before. The extant literature on new product diffusion has found that consumers are often initially reluctant to adopt such products. Recent empirical research has shown that even consumers with expertise in the domain of a new products experience difficulty comprehending and appreciating the benefits of this type of product. Research has shown that prior product category knowledge plays a key role in consumer response to highly innovative products. These findings has shown that prior product category knowledge greatly influences attribute interpretations and overall evaluations of new products (Gregan-Paxton et al., 2002.).

The central problem of consumer behaviour is choice and uncertainty associated with a risk. There appear to be three major ways to reduce uncertainty or learn about the consequences from various brands in a product class: (1) information seeking particularly from informal, personal, and buyer-oriented sources such as friends, reference groups, and family; (2) prepurchase deliberation enabling the buyer to digest information and structure his cognitions related to alternative brands; and (3) reliance on brand image—if one exists—which may create brand loyalty. If brand image does not exist, he may reduce uncertainty by actual purchase experiences (Taylor, 1974.). Considering that, purchase of new products raises the level of uncertainty. Therefore, new product adoption behaviour can be defined as the degree to which an individual adopts innovations relatively earlier than others members in his or her social system. Many studies provide evidence that consumers innovators can be characterized by variables such as income, age, education, social participation, and risk taking propensity (Im et al., 2003.)

Considering all of the above the purpose of this paper is to investigate how students as consumers learn information about new products, their attitudes toward different sources of information and to determine the differences in the styles of decision-making with regard of: types of buying behaviour and types of factors influencing consumer behaviour.

The hypothesis of this paper is:

H₀: Students information gathering process differs according to the socio-demographic characteristics and types of buying behaviour.

Methodology

This research study is built on consumer theory based on behavioural science. In order to study the needs and motives in taking purchase decisions, consumer learning process and attitude formation process, it is necessary to understand following: types of buying behaviour and main types of factors influencing consumer behaviour (Solomon, 2014.). We distinguish the following Types of buying behaviour: Routine Response Behaviour (exhibited when buying low involvement products that are purchased frequently having low cost), Limited Decision Making Behaviour (purchasing products that are bought occasionally and not frequently), Extensive Decision Making Behaviour (products/services that are not bought frequently, and that involve complex considerations and high involvement on the part of consumers,

require more time for decision making), or Impulse Buying Behaviour (purchases with no conscious planning or prior thought). In addition it is important to consider four main types of factors influencing consumer behaviour: cultural (culture, sub-culture, social class), social (reference groups, family, roles and status, personal factors), personal (age and life cycle, occupation, economic situation, lifestyle, personality), and psychological (motivation, perception, sensation, absolute threshold, differential threshold, subliminal perception, learning, attitudes and beliefs) factors.

Many studies have been undertaken on the consumer's use of different sources of information. In particular, the nature and extent of retailer search have been studied by numerous researchers (Kiel et al. 1981.). Purchasing behaviour itself is characterised among other and by information search (by means of internal and/or external sources of information) (Sammer et al., 2005.).

This study was conducted in Sibenik (Croatia) at Polytechnic of Sibenik and comprised students of all departments (Department of Management, Department of Traffic and Department of Public Administration) and years of study. The number of students who studied at Polytechnic of Sibenik is 1100 and this survey was carried out on the sample of 109 students. The data were gathered during the month of January 2017. The applied sample has the characteristics of convenience and homogeneous sample because the students were selected with regard on their availability (visiting lectures). These samples are appropriate for studies where is tested certain theory and it is often used in the literature. The data were processed with the statistical package SPSS 8.0. The statistics of the sample is shown in Table 1.

The data collected from student sample were analysed by using descriptive statistics, non-parametric tests: Kruskal-Wallis test and Mann-Whitney U test. The results of study can help in better understanding of consumers behaviour, ie. students as new consumers and how they evaluate and gather information about new products.

The questionnaire included 16 questions, first eight questions was constructed to identify factors influencing consumer behaviour, following seven questions were constructed to identify information gathering process with regard how consumers evaluate different sources of information according to the specific product purchase, and the last question was constructed to identify types of buying behaviour.

Factors influencing human behaviour variables were measured as: age, gender, region, household income, sources of financing and number of family members. Information gathering process variable were measured as: (1) sources of informing (by past experience; by advices of family, friends and people that they are familiar to; from sellers; from social media, blogs and similar; from TV commercials; from newspapers and magazines commercials; from brochures; from product advertisement; from web sites of products), (2) shopping influencing variables (low price, quality of product, availability of product, product brand).

Types of buying behaviour variable were measured as: Routine Response Behaviour, Limited Decision Making Behaviour, Extensive Decision Making Behaviour and Impulse Buying Behaviour.

Results

Factors influencing human behaviour variables were measured as: age, gender, region, household income, sources of financing, and number of family members. Largest proportion of students are in age of 18 to 20 (62,4%), considering the gender 68% are female and 32% are male, according to the region where they are from 67% are from Coastal Croatia and 33% from Continental Croatia, most of them (50,5%)

have monthly income from 1001 to 2000 HRK and 46% of them are financed by family/parents and them self, 80% students live in household with 4 or more members. (Table 1).

Table 1
Statistic of sample

AGE	Number	Percent	Year of study	Number	Percent
from 18 to 20	68	62,4	First	51	46,8
from 21 to 25	39	35,8	Second	39	35,8
from 26 to 30	2	1,8	Third	19	17,4
31 and more	0	0,0	Total	109	100,0
Total	109	100,0			
GENDER	Number	Percent	Monthly income in HRK	Number	Percent
male	35	32,1	to 1000	33	30,3
female	74	67,9	from 1001 to 2000	55	50,5
Total	109	100,0	from 2001 to 3000	17	15,6
			from 3001 to 4000	4	3,7
			Total	109	100,0
Region	Number	Percent	Sources of financing	Number	Percent
Coastal Croatia	73	67,0	by parents/family	47	43,1
Continental Croatia	36	33,0	Self financing	12	11,0
Total	109	100,0	parents/family and self financing	50	45,8
			Total	109	100,0
DEPARTMENT	Number	Percent	Number of household members	Number	Percent
Traffic	22	20,2	1	2	1,8
Public Administration	18	16,5	2	5	4,6
Management	69	63,3	3	15	13,8
Total	109	100,0	4 and more	87	79,8
			Total	109	100,0

Source: Author

To measure Information gathering process variable and Shopping influencing variables (Table 2) questions were rated on a five-point Likert scale (grades from 1 to 5 have the following means: 1-extremely unimportant, 2-unimportant, 3-neither important nor unimportant, 4-important, 5-very important).

Table 2 clearly shows that non of the variables of Information gathering process was evaluated as extremely important for students (grade 5) or extremely unimportant (grade 1). Students evaluate following variables as important (grade 4): Past experience (average grade 4,09) and internal sources of informing (3,75). Variables: web sites of products (3,06); sellers advice (2,95); social media, blogs, and similar (2,9) were evaluated as neither important nor unimportant (grade 3). Unimportant variables (grade 2) for students are: TV commercials (2,38), newspapers

and magazines (2,34), product advertisement (2,71) and Brochures (2,21). Variable with the highest share of grade 5 is Past experience.

Considering Shopping influencing variables students evaluate as follows: Quality of product as extremely important (4,57), Availability of product (3,87) and Low price (3,45) as important, Brand as neither important nor unimportant (3,42).

Table 2
Information gathering process variable

Sources of informing	Mean	Share of score 5
Past experience	4,09	50,4%
Recommendations of family, friends and people that are familiar to	3,75	21,1%
By sellers advices	2,95	5,4%
Social media, blogs and similar	2,9	6,4%
TV commercials	2,38	1,1%
Newspapers and magazines	2,34	1,1%
Brochures	2,21	0,7%
Product advertisement	2,71	5,0%
Web sites of products	3,06	8,9%
		100,0%
Shopping influencing Variables	Mean	
Low price	3,45	11,0%
Quality of product	4,57	52,9%
Availability of product	3,87	21,6%
Brand	3,42	14,5%

Source: Author

Types of buying behaviour variable were measured in a way that students round up the statement that most accurately described them as a customers. Based on their statements the respondents were segmented into four groups (Table 3).

Table 3
Types of buying behaviour variable

Variable	Percent	Valid Percent	Cumulative Percent
Group 1. Routine Response Behaviour	26	23,9	23,9
Group 2. Limited Decision Making Behaviour	5	4,6	28,4
Group 3. Extensive Decision Making Behaviour	63	57,8	86,2
Group 4. Impulse Buying Behaviour	15	13,8	100,0
Total	109	100,0	

Source: Author

The highest percentage of student (57,8%) is substituted in a group Extensive Decision Making Behaviour (Before purchase of new product I get detailed information about it, Quality is the most important factor for me), in a group Routine Response Behaviour (once I find a brand I like, I stick with it; The national product

brands are best for me; I buy products as much as possible at sale price) is substituted 23,9% of students, Impulse Buying Behaviour (I am impulsive when purchasing) group makes 13,8% of them and Limited Decision Making Behaviour (The more I learn about products its harder to choose the best; I purchase the trendy products) makes 4,6% of students.

We compared Sources of informing variables considering Socio-demographic groups and Types of buying behaviour groups.

H₀: distribution of differences in importance of Sources of information variables do not distinguishes significantly with regard to socio-demographic groups.

H₀: distribution of differences in importance of Sources of information variables do not distinguishes significantly with regard to Types of buying behaviour groups.

Non-parametric tests were conducted: Kruskal-Wallis test and Mann-Whitney U test.

When observing the differences in importance of Sources of informing between Socio-demographic groups (described in table 1) a significant statistical difference was found between:

- Past experience and age ($p=,036$);
- internal sources of informing and age ($p=,038$);
- Past experience variable and region ($p=,005$);
- Past experience variable and sources of financing ($p=,027$),
- Web sites of product variable and number of household members ($p=,037$),

Furthermore when observing the differences in importance of Sources of informing between Types of buying behaviour groups (described in table 3) a significant statistical difference was found between:

- Low price variable and Types of buying behaviour variable ($p=,002$),
- Quality of product and Types of buying behaviour variable ($p=,024$).

Discussion

Students as consumers learn information about new products from sources that they are familiar to. Internal sources of informing have highest importance to them but external sources. The quality of product have highest influence on decision making process as confirmed by facts that the students as consumers are grouped as Extensive Decision Making Behaviour.

Although the research has reached its aims, there were some unavoidable limitations. First, the research was conducted only at Polytechnic of Sibenik on a small size of population who were attending the lectures. Therefore, to generalize the results more participants should be involved. Second, considering that a wide range of factors have influence on consumer behaviour this paper does not include all of them. Finally this paper consider consumer behaviour according to gathering information about new products. However, in order to gain more insight wider range of factors should be included and all aspects of purchasing products.

Conclusion

Considering the above we can conclude that students evaluate their past experience and recommendations of their internal sources of informing as most important to them and they rely on a quality of products. Furthermore, comparing the importance of variables listed below we conclude the following:

- Importance of Past experience variable increase according to the age variable,
- Internal sources of informing have the highest importance to students from 20 to 25 years,

- Past experience variable have the highest importance for students from Coastal Croatia,
- Past experience variable have the highest importance for students with monthly income from 2001 to 3000 HRK,
- Web sites of product variable have the highest importance for students who live in household with 2 members.
- Low price variable have the highest importance for students whose type of buying behaviour was grouped as Routine Response Behaviour,
- Quality of product have the highest importance for students whose type of buying behaviour was grouped as Extensive Decision Making Behaviour.

Based on the above, we can accept the hypothesis of this paper ie. students information gathering process differs according to the socio-demographic characteristics and types of buying behaviour.

Future research could be conducted to identify more clearly differences in decision making process according to the socio-demographic characteristics and types of buying behaviour. Further research could also include a larger sample of students from different universities, wider range of factors influencing consumer behaviour and sources of informing.

References

1. Bettman, J. R. (1970), "Information processing models of consumer behavior", *Journal of Marketing Research*, Vol. 7 No. 3, pp. 370-376.
2. Bray, J. (2008), "Consumer Behavior Theory: Approaches and Models", available at: http://eprints.bournemouth.ac.uk/10107/1/Consumer_Behaviour_Theory_-_Approaches_%26_Models.pdf (12 January 2017)
3. Denona Bogović, N. (2002), "Dugoročna obilježja osobne potrošnje u Republici Hrvatskoj", *Ekonomski pregled*, Vol. 53 No. 7-8, pp. 622-639.
4. Gregan-Paxton, J., Hibbard, J. D., Brunel, F. F., Azar, P. (2002), "So that's what that is": Examining the impact of analogy on consumers' knowledge development for really new products", *Psychology & Marketing*, Vol. 19 No. 6, pp. 533-550.
5. Im, S., Bayus, B. L., Mason, C. H. (2003), "An empirical study of innate consumer innovativeness, personal characteristics, and new-product adoption behaviour", *Journal of the Academy of Marketing Science*, Vol. 31 No. 1, pp. 61-73.
6. John, D. R., Cole, C. A. (1986), "Age differences in information processing: Understanding deficits in young and elderly consumers", *Journal of consumer research*, Vol. 13 No. 3, pp. 297-315.
7. Johnson, E. J., Russo, J. E. (1984), "Product familiarity and learning new information", *Journal of consumer research*, Vol. 11 No. 1, pp. 542-550.
8. Kahraman, C., Büyüközkan, G., Ateş, N. Y. (2007), "A two phase multi-attribute decision-making approach for new product introduction", *Information Sciences*, Vol. 177 No. 7, pp. 1567-1582.
9. Kiel, G. C., Layton, R. A. (1981), "Dimensions of consumer information seeking behaviour", *Journal of marketing Research*, Vol. 18, pp. 233-239.
10. MacInnis, D. J., Folkes, V. S. (2010), "The disciplinary status of consumer behaviour: A sociology of science perspective on key controversies", *Journal of Consumer Research*, Vol. 36 No. 6, pp. 899-914.
11. Nelson, P. (1970), "Information and consumer behaviour", *Journal of political economy*, Vol. 78 No. 2, pp. 311-329.
12. Sammer, K., Wüstenhagen, R. (2006), "The influence of eco-labelling on consumer behaviour—Results of a discrete choice analysis for washing machines" *Business Strategy and the Environment*, Vol. 15 No. 3, pp. 185-199.
13. Solomon, M. R. (2014), *Consumer behavior: Buying, having, and being*, Engelwood Cliffs, NJ, Prentice Hall, Vol 10.

14. Taylor, J. W. (1974), „The role of risk in consumer behavior“, The Journal of Marketing, pp. 54-60.
15. Ward, S., Wackman, D. B., Wartella, E. (1977), How children learn to buy: The development of consumer information-processing skills, Sage Publications, Beverly Hills, CA.

About the authors

Jelena Šišara, univ.spec.oec., is an senior lecturer at the Polytechnic in Sibenik, department of Management. She attended International inter-university postgraduate interdisciplinary doctoral study Entrepreneurship & Innovativeness in Osijek. Her main research interests are entrepreneurship, tourism and marketing. Jelena Šišara published several scientific and professional papers in international and national conferences and journals, she also participated in many scientific international conferences. Author can be contacted at jelena@vus.hr.

Divna Goleš, mag. oec., is an senior lecturer at the Polytechnic in Sibenik, department of Management. Her main research interest lies in the field of quality and tourism. She published several scientific and professional papers in international and national conferences and journals, she also participated in many scientific international conferences. Author can be contacted at divna@vus.hr.