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CONSUMER BEHAVIOUR AND PROMOTIONAL STRATEGIES DIFFERENCES ON THE MARKET OF MILK IN TURKEY AND SLOVAKIA

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Abstract

The paper deals with the consumer behaviour of young Slovak and Turkish consumers on the market of cow's milk. Opinions of nutrition specialists differ on whether it is beneficial or not for humans to consume the cow's milk. However, in general, milk is considered to be a very important component of the diet not only for children but also for adults. Both countries, Turkey and Slovakia rank among important producers of milk and milk products. This study explores and compares consumers' preferences for milk in chosen areas of Turkey and Slovakia and also tries to determine the profiles of young adult consumers based on their preferences, selected psychological dispositions and socio-demographic factors. To reach these objectives, the simple questionnaire was designed, and data were collected among young adults in Turkey and Slovakia. In our study we work with two independent samples. The first sample consists of 270 young adults (aged 25 – 42) from Nitra, Slovakia and the second sample consists of 585 young adults from Istanbul, Turkey. The paper provides useful information about the consumer behaviour of young adults (Millennials) in both countries and analyses promotional strategies of milk on Turkish and Slovak market for this target group. Associations that consumers have with milk can influence their buying behaviour on the market of milk and milk products. The way consumers perceive milk can also influence the way they perceive milk packaging. Milk packaging that consumers have already known can influence their associations with milk and also with other milk packaging that they expect. Product packaging is essential for consumer perception and resulting buying behaviour.

Keywords: Cow's milk, Milk Market, Consumer Behaviour, Consumer Choice, Millennials

1. Introduction

Throughout the world, there are more than 6 billion consumers of milk and milk products (Kapaj & Deci, 2017). Opinions of nutrition specialists differ on whether it is beneficial or not for humans to consume the cow's milk. However, in general, milk is considered to be a very important component of the diet not only for children but also for adults.

In 2018 Slovakia produced 0,8million tonnes and Turkey produced more than 10 million tonnes of raw cow's milk which was delivered to dairies (Eurostat, 2019). Milk production in Turkey has shown significant development in recent years (Kýrdar & Karaca, 2017). Both countries, Turkey and Slovakia rank among important producers of milk and milk products, Slovakia mainly as a part of EU 28.

The average consumption of dairy products in 2016 in Slovakia was about 173 kg per capita. The average consumption of drinking cow’s milk was 45,8 kg per capita (Masár, 2018). The most consumed dairy products in Turkey are yoghurt, white cheese, kashar cheese and ayran (drink made of yoghurt and water). Per capita consumption of dairy and dairy products in Turkey is around 236 kg. Consumption of drinking milk is low, but recently, market share of UHT milk and low-fat milk has been increasing (Duyum, 2016). Because the consumption cow’s milk is generally considered to be very important for human health, it is important to motivate consumers to buy this product.

This study explores and compares consumers’ preferences and attitudes towards milk in chosen areas of Turkey and Slovakia and also tries to determine the profiles of young adult consumers based on their opinions, selected psychological traits and socio-demographic factors.

Consumers’ choice is generally considered to be a rational, well-judged cognitive process. Increasingly however, research has shown that a significant part of consumer decision-making is unconscious (Fitzsimons et al., 2002). Clegg (2000), Dijksterhuis et al. (2005), Dhar (2012), Krishna et al. (2014) and others found that only limited number of consumers’ choices are based on conscious information-processing strategies. A significant part of choices made by consumers is unconscious and results from different cues present in the external and internal environment of individuals. Many experimental studies in consumer behaviour research and social psychology have confirmed that environmental cues together with various internal factors strongly influence the final buying behaviour (Jacob et al., 2011).

The influence of personality characteristics and temperament structure on consumer behaviour is very discussed, but rarely explored topic of marketing research. There are only a few authors who investigate personality traits and their influence on the buying behaviour.

2. Material and Methods

In our study we work with two independent samples. The first sample consists of 270 young adults (aged 25 – 42) from Nitra, Slovakia and the second sample consists of 585 young adults from Istanbul, Turkey. The chosen cities are not capital cities, but both are very important metropolises in given countries. All respondents, according to their structure, belong to the demographic segment of “Generation Y” or “Millennials”. This segment was chosen intentionally because it has a great purchasing power on the market and thus, on the market of milk as well. The generation of young adults is also able to influence both older and younger generations of consumers greatly. All respondents have completed at least secondary education, they live in Nitra or in Istanbul and they are all employed. Other characteristics are stated in Table 1.

Table 1. Respondents according to Gender and Income

Nitra, Slovakia		Income			Total
		less than 500€/month	500-1000€/month	more than 1000€/month	
Gender	Male	4	68	18	90
	Female	26	110	44	180
Total		30	178	62	270
Istanbul, Turkey		Income			Total
		less than 500€/month	500-1000€/month	more than 1000€/month	
Gender	Male	8	191	30	229
	Female	61	273	22	356
Total		69	464	52	585

Source: Authors’ elaboration

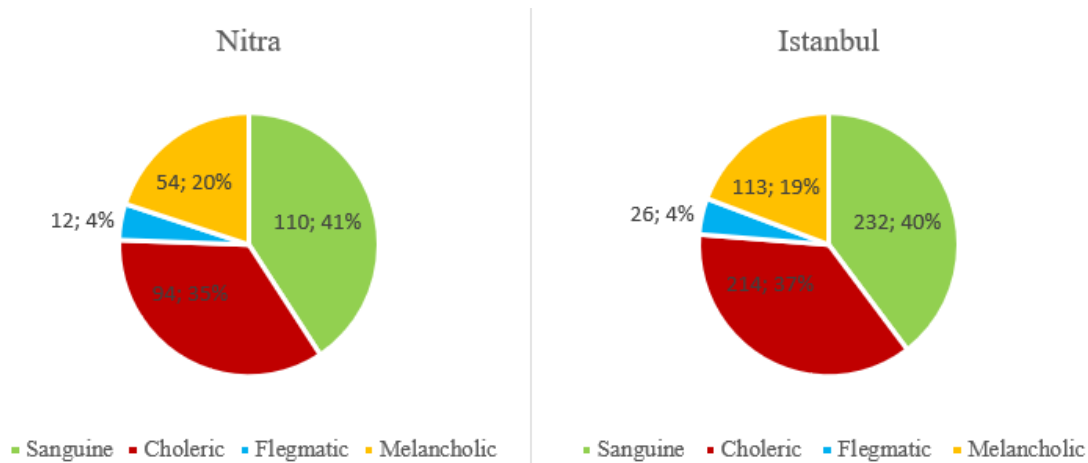
A simple questionnaire was constructed to achieve the research objectives. It was translated into Turkish and English language. A questionnaire consists of several parts. First part represents the short personality inventory based on the Big Five Model (NEO FFI) and Eysenck Personality Questionnaire (EPQ). Four personality traits were determined – neuroticism (N), extroversion (E), openness to

experience (O) and conscientiousness (C). From the scale of neuroticism and extroversion, the temperament of respondents was calculated. Second part of the questionnaire represents a basic association experiment. Respondents were asked to write down words that appear in their minds when they hear/see a word “milk” and words that they have associated with the packaging of milk. Third part consists of several statements connected to the milk consumption and buying behaviour on the market of milk. Respondents were asked to express if they agree or disagree with mentioned statements on the 5-degree Likert-type scale. Last part of the questionnaire gathers demographic information about respondents.

The dependences between psychological characteristics of respondents and their preferences were investigated by suitable statistical methods (Mann-Whitney U test, Kruskal-Wallis one-way analysis of variance and correlation analysis). https://en.wikipedia.org/wiki/Kruskal%E2%80%93Wallis_one-way_analysis_of_variance

3. Results and Discussion

Representation of selected personality traits (neuroticism and extroversion) of respondents corresponds with the anticipated representation of these characteristics in the worldwide population. Researchers state that there are 50-75% of extroverts in the worldwide population, but all sources are inconclusive. There is no research that would prove the exact worldwide distribution of extroversion.



Source: Authors' elaboration

Figure 1. Distribution of Temperament Traits among Respondents from Nitra and Istanbul



Source: authors' elaboration

Figure 2. Reasons why Consumers do not Consume Cow's Milk

The distribution of individual temperament traits of respondents from Nitra and Istanbul is surprisingly similar. There are 24% of introverts among respondents from Nitra and 23% of introverts among respondents from Istanbul (Figure 1).

Table 2. Associations that Consumers Have with “Milk” and “Milk Packaging”

	Association with milk	Association with milk packaging
Nitra	cow, white colour, health, strength, Alps, Granko, lactose, chocolate, bones, breakfast	cow, white colour, blue colour, nature, grass, glass of milk, farm
Istanbul	health, cow, calcium, white colour, cheese, nature, Sütlava, Muhallebi, chocolate	cow, nature, meadow, white colour, blue colour

Source: Authors' elaboration

20% of Slovak consumers and 21,2% of Turkish consumers do not consume milk and milk products. Reasons why they do not consume milk, which they stated, are shown in Figure 2. More than 48% of Slovak respondents and almost 60% of Turkish respondents, who do not consume cow's milk, suffer from health problems connected with the consumption of milk. The number of respondents who are allergic to milk protein or lactose intolerant is surprisingly high and can indicate a spectrum of problems on the milk market.

Table3. Results of the Correlation Analysis (Slovak Consumers)

Slovakia/ Nitra		When buying milk, the most important factor is quality.	When buying milk, the most important factor is the price.	The packaging of milk is very important for me.	I have a favourite brand of milk.	I often buy different brands of milk.	I prefer milk from local/regional producers.
Spearman's rho	When buying milk, the most important factor is quality.	1	-,427**	0,127	,180**	-,147*	,339**
	When buying milk, the most important factor is the price.	-,427**	1	-0,023	-0,117	0,107	-,175**
	The packaging of milk is very important for me.	0,127	-0,023	1	0,071	0,012	,214**
	I have a favourite brand of milk.	,180**	-0,117	0,071	1	-,608**	,188**
	I often buy different brands of milk.	-,147*	0,107	0,012	-,608**	1	-,134*
	I prefer milk from local/regional producers.	,339**	-,175**	,214**	,188**	-,134*	1

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

Source: Authors' elaboration

Mostly stated other reasons for not consuming milk were bad taste of milk and milk products, veganism, another type of diet and/or healthy lifestyle.

The association experiment has shown the main associations that consumers have with milk and milk packaging. The results for both countries (cities) are stated in the Table 2. Respondents who do not consume cow’s milk were not excluded from the experiment.

The main associations of Slovak consumers represent logical associations of the product’s environment (cow, nature), gained knowledge about health benefit of milk (health, strength, bones), but also habits (breakfast, Granko – the typical Slovak cocoa powder for milk beverages). The word “lactose” was mostly stated by respondents who are lactose intolerant and therefore they cannot consume milk and milk products. Words “Alps” and “chocolate” are probably strongly associated with a milk chocolate Milka, which is very popular in the country.

The main associations of Turkish consumers are also mostly connected with “cow”, with generally accepted health benefits of milk (health, calcium), with milk products (cheese, chocolate) and many respondents also stated Sütlavaand Muhallebi – Turkish milk desserts.

Table 4. Results of the Correlation Analysis (Turkish Consumers)

Turkey/Istanbul		When buying cow's milk, the most important factor is quality.	When buying cow's milk, the most important factor is the price.	The packaging of milk is very important for me.	I have a favourite brand of milk.	I often buy different brands of milk.	I prefer milk from local/regional producers.
Spearman's rho	When buying milk, the most important factor is quality.	1	-,418**	0,039	,175**	-,146**	,177**
	When buying milk, the most important factor is the price.	-,418**	1	-0,053	-,106*	,113*	-0,032
	The packaging of milk is very important for me.	0,039	-0,053	1	-0,003	0,074	0,07
	I have a favourite brand of milk.	,175**	-,106*	-0,003	1	-,628**	-0,088
	I often buy different brands of milk.	-,146**	,113*	0,074	-,628**	1	0,054
	I prefer milk from local/regional producers.	,177**	-0,032	0,07	-0,088	0,054	1

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

Source: authors' elaboration

It is interesting that even though consumers from both countries, who cannot consume milk due to health issues, they also associate milk with health and strength.

We can assume that associations that consumers have with the milk can influence consumer perception, consumer behaviour and decision-making process of consumers on the milk market and help to sell milk products, if sellers use above mentioned associations on the packaging. On the other hand, milk packaging that consumers have already known can influence their associations with milk and also with milk packaging that they expect. Anyhow, we can assume that the product packaging is essential for consumer perception and resulting buying behaviour.

Subsequently, the attitudes of consumers towards the cow’s milk were investigated. Respondents who do not consume cow’s milk were excluded (54 respondents from Nitra and 124 respondents from

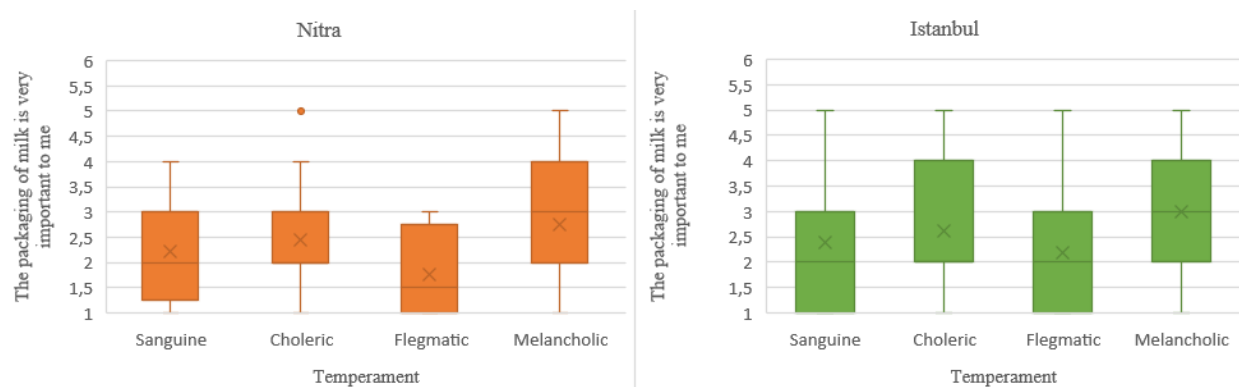
Istanbul). Remaining respondents were asked several questions related to their buying behaviour on the milk market.

Using the nonparametric correlation analysis, the correlations among individual answers were found (Table 3, Table 4). The more important is the quality of milk, the less important is the price of the product. More than 64% of Slovak respondents and more than 66% of Turkish respondents stated that the most important factor when they are buying milk is its quality. The more consumers prefer quality, the more they prefer local/regional producers. When consumers find a brand that they like, they tend to stay loyal to this brand. Respondents who prefer quality and prefer local/regional producers will more likely have a favourite brand of milk.

Again, we can see that behavioural tendencies of Slovak and Turkish consumers are very similar, so we can assume, that the consumer behaviour on the milk market is probably very similar in different parts of the world.

We also investigated if consumers differ in the conscious perception of milk packaging according to their temperament structure and according to individual personality traits (NEOC). Using Kruskal-Wallis one-way analysis of variance and Mann-Whitney U test it was found out that temperament structure and neuroticism (N) significantly influence the perception of milk packaging.

Kruskal-Wallis test has shown (Figure 3) that there is a significant difference in the subjective importance of milk packaging between individual temperaments ($p = 0,026$ for Nitra, $p = 0,01$ for Istanbul)



Source: Authors' elaboration

Figure 3. Different Importance of Milk Packaging among Respondents in Nitra and Istanbul

Mann-Whitney U test has shown that respondents with higher neuroticism perceive milk packaging differently in comparison with respondents with lower degree of neuroticism (Table 5, Table 6).

Table 5. Mann-Whitney U Test for Neuroticism

	The packaging of milk is very important for me.		The packaging of milk is very important for me.
Nitra		Istanbul	
Mann-Whitney U	4796,000	Mann-Whitney U	21942,500
Wilcoxon W	9452,000	Wilcoxon W	42852,500
Z	-2,199	Z	-3,094
Asymp. Sig. (2-tailed)	0,028	Asymp. Sig. (2-tailed)	0,002

Source: Authors' elaboration

Table 6. The Difference in Importance of Milk Packaging among Consumers in Nitra and Istanbul

Neuroticism – NITRA		N	Mean Rank	Sum of Ranks
The packaging of milk is very important for me.	High	120	116,53	13984,00
	low	96	98,46	9452,00
	Total	216		
Neuroticism – ISTANBUL		N	Mean Rank	Sum of Ranks
The packaging of milk is very important for me.	High	257	247,62	63638,50
	low	204	210,06	42852,50
	Total	461		

Source: Authors' elaboration

We can assume that consumers with less emotionally stable temperaments (melancholic and choleric) perceive emotional cues of the environment more sensitively and their buying behaviour on the milk market differs from consumers with higher emotional stability.

4. Conclusions

Milk has been known as an important source of human nutrition since 4000 BC. Even though opinions of nutrition specialists differ on whether or not it is beneficial for humans to consume the cow's milk, it is considered to be a very important component of the diet not only for children, but also for adults. It is interesting that consumers from Nitra and Istanbul, who cannot consume milk due to health issues, still associate milk with health and strength.

We can assume that associations that consumers have with milk can influence their buying behaviour on the market of milk and milk products. The way consumers perceive milk can also influence the way they perceive milk packaging. Milk packaging that consumers have already known can influence their associations with milk and also with other milk packaging that they expect. We can conclude that the product packaging is essential for consumer perception and resulting buying behaviour.

It was also found out that temperament structure and personality traits significantly influence the perception of milk packaging. Consumers with less emotionally stable temperaments (melancholic and choleric) perceive emotional cues of the environment more sensitively and their buying behaviour on the milk market differs from consumers with higher emotional stability. Surprisingly, there are no big differences in consumer behaviour of young adults in Nitra and Istanbul.

Based on our results and the results of other authors we can assume that the personality of consumer significantly influences buying behaviour. For example, Verplanken and Herabadi (2001) found the positive dependence between impulsive buying behaviour and extroversion and the negative dependence between impulsive buying behaviour and conscientiousness. Matzler et al. (2006) confirmed the dependence between personality traits and the hedonic value of products. Chen (2007) proved the significant influence of the personality on the selection of food products. Rybanská et al. (2018) proved the influence of temperament structure on the perception and evaluation of product packaging.

Apart from the personality and the temperament structure, there are also other important factors that can lead consumers to the final buying decisions. Fazio et al. (1982), Jain and Posavac (2004), Singh and Verma (2017), Jaeger et al. (2018), Rybanská et al. (2019), and others found out that associations with specific products significantly influence consumers' perception and decision-making process. Previous experience is important as well, mainly for the creation of associations with selected products.

The results of presented research are promising for determination of suitable promotional strategies on the milk market for young adults in Turkey and Slovakia, although the further research is needed.

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