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FEATURES OF PRICE PERCEPTION BY CONSUMERS WITH DIFFERENT PSYCHOLOGICAL CHARACTERISTICS

У статті ми узагальнили результати досліджень, пов'язаних з психологічними ефектами сприймання цін при різних способах їх представлення та продемонстрували результати емпіричного дослідження особливостей сприймання цін та здійснення вибору товарів альтернативних цінових категорій споживачами з різними психологічними характеристиками.

Психологічні ефекти ціни були об'єднані нами в декілька груп. Ефекти ціни, пов'язані з її сприйманням як числового ряду, який подумки зчитується зліва-направо, призводять до того, що при різних способах презентації ціни її сприймання зменшується при зміщенні акценту (значаща цифра, розташування на ціннику) вліво. Ефекти пов'язані з порядком представлення товарів та контекстом, пояснюються сприйманням ціни як меншої при зміщенні акценту на більш дорогівартісні товари, що виступають еталонами, або оточують заданий товар.

У результаті емпіричного дослідження було виявлено, що окрім когнітивних процесів на сприймання ціни впливає ряд суб'єктивних характеристик споживача. Так низький рівень суб'єктивного економічного благополуччя, самооцінки, негативне ставлення до грошей впливає на схильність споживачів купувати виключно дешеві товари та суб'єктивно занижувати їх еталонну вартість. Висока самооцінка та рівень суб'єктивного економічного благополуччя, схильність до демонстративного споживання, слідування моді корелює із схильністю споживача обирати товари за високими цінами. Ірраціональне ставлення до грошей (підвищена тривожність щодо грошей або сприймання грошей як ліків від депресії та нудьги) та мотивація на уникнення невдач обумовлює схильність споживачів ставати «мисливцями за знижками». При виборі дисконтних товарів основними тригерами виступає бажання отримати додаткову вигоду (подарунок чи додатковий товар за зниженою

ціною), а також велика номінальна (абсолютна чи відсоткова) презентація розміру знижки.

Ключові слова: психологічна ціна, сприймання ціни, ціноутворення, знижки, психологічний профіль споживача.

Formulation of the problem. The impact of the price on consumer behavior is very significant. The price is the actual amount of money that you will have to pay at the moment of purchase, and the subjective equivalent of the usefulness of the purchased product, the reflection of its value. In terms of the psychology of consumption, the price affects the image of the product, the perception of its position among analogues. The impact of prices determines all phases of the consumer cycle: from finding of information and evaluating of alternatives, to purchase and evaluate the product during consumption.

Price is analyzed as a marketing influence factor for consumer behavior: as a tool of positioning, sales promotion, a competitive advantage. But consumers choice of products in different price categories, their sensitivity to prices, the tendency to react in a certain way to price offers or discounts are determined not only by external (such as marketing) factors.

Personality characteristics of the consumer also determine the perception of prices. They affect the subjective view of a fair price, the formation of internal standards of price for different product category, and cause personal perceptions of profitable or unprofitable offers, high cost or cheapness, availability of products in a certain price range. Research of the subjective effects of price perception and psychological characteristics of the individual, which determine these effects, can enrich the field of price psychology and give impetus to the development of new tactics of psychological pricing.

Analysis of recent research and publications. The questions of pricing methods and strategies from the standpoint of markets and individual enterprises are deeply researched by professional community. Comprehensive developments in this area are presented in the published work of Peter Hill, Robert J. Dolan, Hermann Simon, Bill McFarlane, Tim Smith, Thomas T. Nagle, Craig Zawada, Harry Macdivitt and Mike Wilkinson.

The questions of marketing were dealt with by such Ukraine researchers as Dlihach A. O., Duhina S. I., Kolesnykov O. V., Koriniev V. L., Oklander V. F., Pavlenko A. F., Petryk O. I., Tormosa Yu. H., Khaminich S. Y., Shkvarchuk L. O. Significantly fewer studies focus on psychology of price and pricing. Among the theoretical and applied researches in this area worth noting the published work of William Poundstone, Markus Husemann-Kopetzky, Leigh Caldwell.

Some aspects of the psychology of pricing and influence of price on consumer behavior are considered within the framework of research on behavioral economics and neuromarketing, in particular in the books by Phil P. Barden, Martin Lindstrom, Roger Dooley, David Lewis and others.

The purpose of the article: to characterize the psychological effects of price perception as if presented in different ways and to identify the features of price perception and the choice of products in price categories for consumers with different psychological characteristics.

Presenting main material. A considerable number of the results of applied research, concerning the different aspects of price psychology, presented recently. Much of these studies are devoted to the psychology of price perception as a numerical series. So, well-known is the study by Manoj Thomas and Vicki Morwitz, on the peculiarities of perception nine-ending prices. According to the results of this study, nine-ending prices will be perceived to be smaller than a price one cent higher if the leftmost digit changes to a lower level (e. g., \$3.00 to \$2.99) but not if the leftmost digit remains unchanged (e. g., \$3.60 to \$3.59) [6; 55].

At the heart of the idea of the left-digit effect in price is the thesis about mentally reading the prices from left to right and the property of consciousness to simplify the numerical row to the significant left numeral, neglecting the right. In further research, this idea was supplemented by the effects of the perception of the latest numeral for different currencies; the comparison of the effect of prices ending on 8 and 9; the perception of prices ending on 5 in countries where the smallest exchange coin or bill is 5, not 1 (in Australia 5 dollars and 5 cents). In the context of perception of price as numerical series, were also conducted the studies on the features of perception of large prices (more than a thousand) with comma or cents in pricing. Keith S. Coulter demonstrated that including commas (e. g., \$1,599 vs. \$1599) and cents (e. g., \$1599.85 vs. \$1599) in a price's can change how the price is encoded and represented verbally in a consumer's memory. These prices seem higher. These effects according to researchers occur because consumers non-consciously perceive that there is a positive relationship between syllabic length (as the price is mentally read) and numerical magnitude [2; 395].

In addition, prices deprived of comma or cents are better perceived in the context of hedonistic goods. Vintage and exclusive products, as well as goods that are bought for pleasure (beauty industry, refined food and drinks, etc.) are better to sell at rounded prices. Non-rounded prices work well in conjunction with the goods of rational consumption associated with the adjusted calculation. A study by a team of researchers from Cornell University has shown that people learn to associate accuracy of calculations with smaller quantities, and this precedes their price scales of judgments.

According to the results of this study, people were willing to pay more for realty when prices were as accurate as possible (six-digit prices without any zero) [5; 3]. The phenomenon of non-rounded prices perception as a more accurate, and therefore more fair, has been confirmed for many groups of goods.

Investigating the psychological peculiarities of price perception experts pay attention not only to the perception of the numerical series, but also to the perception of prices in the context of the design of a price tag (size, location, color). Studies of the already mentioned Keith S. Coulter have shown the relationship between the size of the numeral on the price tag and their assessment: the big numeral associated with higher prices according to the Effects of magnitude representation congruency [3].

A number of studies, generalized in the work of Nick Kollenda, testify to the influence of the location of the price on the price tag on its perception. According to the psychology of perception of the numerical series from left to right it's better to shift to the left the prices that people associate with the left (i. e., low prices) and move high prices to the right – a position that's congruent with a high numerical magnitude. Another regularity is related to the order of presentation of the product and the price of it, if they are placed as a one image. Nick Kollenda points out that when products were displayed first, participants based their purchase decision on the product qualities; when prices were displayed first, participants based their purchase decision on the economic value. Thus, for luxury goods, it is necessary to show the goods, then show the price, and for the low-cost goods – the opposite. For expensive, exclusive goods, emphasizing that the price is not important, the image of the product must be larger, the price should be in small print [4].

The subject of some studies is the influence of the color of the price tag. Tanel Mehine's research has shown that yellow price tags are associated with discounts (they compel the consumer to imagine the reference price as higher), even if the price remains unchanged [7; 26]. Phil P. Barden noted that black and white price tags are perceived as more expensive in comparison to blue and red, or price tags, which show discounts. According to him, if you use the promotional price tag, then even an inflated price will be perceived by consumers as reduced [1; 74].

A separate group of research in the field of psychological pricing is devoted to questions of the impact of the order of presentation of goods with different prices and effects associated with the comparison of goods with alternative prices. The main idea of these studies is the impact of the context: the price is perceived as higher or lower, depending on what the price proposals surround it, and what price in this comparison is seen as

a standard. Specialists distinguish the so-called external standards (given by the manufacturer or seller average prices for a specific product category or line, comparative prices in e-commerce, etc.), or an internal standard (vision of the price of some product formed in consequence of the experience of purchasing goods of the such category).

Nick Kolenda shows how this effect works when a list of goods is presented in ascending order or lower prices. «If the initial prices are high, customers generate a higher reference price. When customers use that reference price to evaluate the options, all of the options seem like a better deal. When you sort products by ascending price (i. e., low to high), customers view each new product as a loss in price. With each new option, they're gradually losing the ability to pay a lower price. Thus, they feel motivated to minimize that loss by choosing a lower priced product. But here's the flipside. When you sort products by descending price (i. e., high to low), customers view each new product as a loss in quality. Thus, they feel motivated to retain a higher quality (and more expensive) product» [4].

The comparison effect works also in the case of the presentation of discounts on goods, and then the standard is the previous prices without discounts. Phil P. Barden gives the results of the study, in which the researchers printed catalogs of products that were sold at reduced prices, but without a demonstration of previous prices, and catalogs showing both prices for goods (old and new). Products from the second type of catalogs were sold much better. People were more willing to buy a product for \$ 40, if next is written: «The usual price is \$ 48» than for \$ 39, but without indicating a higher «regular» price [1; 77].

When it comes to discounts, it is important to visualize the benefit as much as possible, contrasting the old and the new price (by color, the size of the scarf). It is also important that a quick reading of discount offer shows its significance. «Consider a \$50 blender. Which discount seems like a better deal: 20 % off vs. \$10 off? Do the math. Both discounts are the same monetary value. However, one discount has an advantage». – Nick Kolenda notes [4]. The discount, whose numeric expression will be bigger, will seem more profitable. In this case Kolenda advised to use «Rule of 100» by Jonah Berger: to give percentage discounts when your price is under \$100 and give absolute discounts when your price is over \$100.

The above studies quite comprehensively characterize the cognitive aspect of price perception. However, they do not answer the question: can personal characteristic determine consumer's sensitivity to prices and price proposals and influence some features of prices perception, including the perception of the standard price or the discount offer.

Cooperating with Safronova A. V., we conducted several studies to identify the relevant addiction. The purpose of these studies was to identify how the psychological characteristics of the consumers influence their price perception and the tendency to respond to certain price offers. The participants of both studies were 218 people.

In the first study, respondents were offered to purchase goods of mass consumption in the «virtual store», where each product category was represented by a comparative range of prices (goods at low price, medium and high). All respondents were divided into five groups: respondents, who selected goods at the lowest prices in all product categories (Economy type – 6.6 %); respondents, who chose goods at low prices or lower than average prices, but in certain product categories, they chose goods at a higher price (Apathetic type – 13.2 %); respondents, who were inclined to choose goods of the middle price range (Rationalistic type – 41.8 %); respondents, those who chose goods at prices above the average (Demonstration type – 20.9 %); consumers, who preferred goods of the highest price category (Perfectionistic type – 17.6 %).

Subsequently, respondents were asked to answer questions from a number of personal questionnaires: to identify the psychological type of the consumer (Individualist, Innovator, Fashion lover, Traditionalist, Conservative, Situational, and Indifferent), the attitude to money, the level of subjective economic well-being and self-esteem. It allowed to analyze the psychological profiles of the typical representative of the above groups.

As a result of empirical study, it was found that the willingness to choose a product for a certain price category is conditioned not only by the context (the price range for a certain product category with the conditional average price standard), but also by a number of psychological characteristics of consumers.

Economical type respondents have low self-esteem, low level of subjective economic well-being, mostly negative attitude to money and increased anxiety about money. Among them there are many representatives of «Conservative» and «Traditionalist» type of consumers.

The Apathetic type has an average self-esteem, it's mostly men, among them are many consumers of «Indifferent» and «Situational» types, they choose products that they have been advised by their friends and are trying to save time on purchases. Representatives of the apathetic type have an average level of subjective economic well-being and a neutral emotional money attitude.

Consumers of a Rational type have an average self-esteem, a positive attitude towards money, an average level of subjective economic well-being. Among them, different psychological types of consumers are proportionally represented.

Demonstration type respondents are mostly «Individualist» and «Fashion lover», they try to emphasize their individuality through the products they choose. They have a middle and high level of subjective economic well-being, high self-esteem and relate to money with ease, without negative emotions towards them.

Representatives of the Perfectionist type most appreciate the prestige of the product, its unique characteristics. These are people with a high level of subjective economic well-being, with a high self-esteem and a positive attitude towards money.

In the second study, we presented in a «virtual store» consumer goods with a small price range, but some of them were presented as discount products. These were goods with different promotional offers (« $1 + 1 = 3$ », «second product as a gift», «a gift with a product», «discount for the next purchase»). Some offers showed a percentage or absolute discounts. The nominal price of goods represented as a reduced price could be lower, averaged or higher than standard.

At such an exposition of the goods, most respondents favored goods offered at a discount. On average, only 15 % of the elections were for goods without discounts in each category of goods. The largest number of elections were for products offered as « $1 + 1 = 3$ » (17.4 %) and «a gift with a product» (15.8 %), although the latter were, as a rule, one of the most expensive in their product categories.

The benefit from the proposed addition apparently compensated the «pain» of paying. Promotional offers with addition, which the consumer received immediately at the time of purchase, were much more attractive than the proposals with a delayed gain (coupon or discount for the next purchase). The number of the elections of such proposals was only 3.3 %. Among the proposals without addition, the largest number of elections were on goods with the highest discount denomination (in percentage or absolute equivalents) in comparison with the same goods without a discount (15.6 %), although their price often was higher than average. At the same time, only 9.6 % percent of consumers chose for the goods with a lower discount denomination, but more profitable for the price.

However, in this study we were interested not only in the influence of the method of representation of the price on the choice of consumers, but also on the influence of certain personal characteristics on the positive perception of various promotional offers and the tendency to choose primarily the goods with discounts.

26.7 % from the respondents who participated in this study turned out to be real «discount hunters»: they consistently selected only products at discount prices in our «virtual store». According to the results of

the questioning, they showed a tendency to buy discounted goods impulsively, for the future; to postpone the purchase of the necessary goods, if they have no discount; easily switch over the favorite brand to other discounts brand; specially attend sales; collect promotional coupons; choose a remote store, if there were discount products.

The most expressive psychological feature of such «discount hunters» was a specific attitude to money. The interest in discount products is the higher, than the higher is the anxiety about money. Such consumers choose goods for a long time, they are nervous about the right choice. They often check the contents of their purse or a bank account. They can envy the financial well-being of others, overestimate the importance of money. A characteristic of such consumers according to the results of our study was also the motivation to avoidance of the fails. Respondents with low interest in discount products (20.3 % of the interviewed) showed a tendency to success motivation and a positive rational attitude towards money.

It is interesting that only part of respondents belonging to the group of «discount hunters» had the same psychological profile as our Economical type of consumers (those who choose goods at the lowest prices). The second type of respondents, who also search for discounts, comprises the consumers who do not have anxiety about money and have average and even high indicators of subjective economic well-being. Among such consumers there are many representatives «Fashion lover», they are prone to impulsiveness and perceive money as a cure for depression and boredom. The opportunity to buy a discount product brings them real pleasure and equates to the form of avocation and relaxation.

As we see, the interest in discount products does not correlate with the level of subjective economic well-being or psychological type of consumer. Instead, it is conditioned by subjective attitude towards money or dominant consumers' motivation. At the same time, when there are a discounted products among others, the focus of consumers moves from comparing prices with a certain average standard to assessing the potential benefits of a promotional offer or discount (cursory perception effects of the contrast presentation of the old and the new price or certain addition become a trigger of consumer choice).

Conclusions. The studies we have analyzed show that perceptions of prices can be due to several factors. On the one hand, the features of mental reading of price as a numerical series influence its perception. On the other hand, the awareness of the price offer is determined with the order of presentation of goods at different prices, a way of comparing of such goods and the context in which the price is presented. The subjective features of the consumer also influence the price perception.

The subjective level of economic well-being, attitude to money, self-esteem, psychological type of consumer correlate with willingness to choose cheap or expensive goods. The irrational attitude towards money and the motivation to avoidance of the fails related with the predisposition to buy mainly goods at discounts. These characteristics make the consumer more vulnerable to tricks with prices and discounts.

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FEATURES OF PRICE PERCEPTION BY CONSUMERS WITH DIFFERENT PSYCHOLOGICAL CHARACTERISTICS

We have summarized the results of research related to the psychological pricing and demonstrated the results of an empirical study of the peculiarities of price perception and the choice of goods of alternative price categories by consumers with different psychological characteristics.

The psychological effects of price have been grouped into several groups. The price effects associated with its perception as a numerical series, which is mentally read from the left to the right, leads to the fact that the price seems lower if we reduce by one left numeral, or visually present the price on the left. The effects are related to the context of price presentation, associated with perception the price as lower if you present a product after goods that are more expensive or in the context of goods with higher prices. Effects of contrast comparison work also if discounts are presented.

As a result of empirical research was found that prices perception determined by a number of subjective characteristics of the consumer. The low level of subjective economic well-being, self-esteem, and negative attitude to money correlates with the tendency of consumers to buy cheap goods and subjectively lower their standard price. High self-esteem and the level of subjective economic well-being, the tendency to demonstrative consumption, following by the fashion correlates with consumer propensity to choose products at high prices. Irrational attitude to money and the motivation to avoid failures causes the propensity of consumers to become a «discounts hunter». The main triggers of choosing discount products are the desire

to get additional benefits and large nominal presentation of the amount of the discount.

Key words: *psychological price, price perception, pricing, discounts, consumer psychological profile.*

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