

AN ASSESSMENT OF CONSUMER BEHAVIOR IN THE QUALITY TO PRICE RELATIONSHIP OF TOMATOES IN THE SLOVAK REPUBLIC ENVIRONMENT

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ABSTRACT

The price of tomatoes in the Slovak market has been growing. Consumer behavior is not always rational and is often influenced by external stimuli, like product prices. In this context, the purpose of this study is to analyze if knowledge of the price of a product affects consumer behavior. An experiment was performed in which university students tasted four types of tomatoes with disclosed prices, and then tasted the same tomatoes without knowing their prices. After each tasting, they evaluated the tomatoes in a questionnaire. Using descriptive statistics and machine learning techniques, the findings of this study corroborate that the knowledge of current prices significantly directly proportionally affected participants' perception of the quality of the tomatoes. Based on the results, we recommend using this finding in pricing and in creating an overall pricing strategy not only for agricultural enterprises.

Keywords: customer experience, price expectations, customer behavior, price effect, descriptive statistics

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INTRODUCTION

Standard (neoclassical) economics says that the rational maximization of financial and product wealth is the main goal of a customer in the buying process. On the other hand, there are cases in which the results of a customer's decision making in the buying process are not in accordance with that stated goal (Berg & Gigerenzer, 2010; Prechter & Parker, 2007;

Viksne et al., 2016). Behavioral economics as a field of economy is trying to combine standard economics with psychological theories to analyze and explain irrational customer behavior (Katuščaková, 2018). Behavioral economics describes how psychological aspects, such as cognitive errors, fear of regret, or self-control problems, influence decision making in the process of buying products (Statman, 1995).

Research of customer behavior is widespread nowadays and includes such things as the analysis of herd behavior (Filiz et al., 2019), planned behavior (Warsame & Ileri, 2016), customer journey (Kakalejčík, 2018), advertising perception (Liu et al., 2014) and others. Even so, many questions about customer psychology that have yet to be answered and analyzed.

Although the results of customer behavior analysis are often in conflict with neoclassical economics, they are used in different fields of business management to reach marketing goals (Statman, 1995). For example, it is known that the prices of goods, as well as the brand of goods, have a significant influence on customer decisions in the purchasing process (Nagy, 2018; Conover, 1984; Al-Salamini & Al-Hassan, 2016). The influence of brand and price on customer decisions in the purchasing process for various goods (beer, wine, smartphones, cars) have been studied by Stros et al. (2019); McConnell (1968); Lockshin (2006); Akkucuk & Esmaeili (2016); and Komaladewi & Indika (2017). In these studies, a significant effect on the purchasing process was attributed to the brand of goods sold. When selling some kind of food products such as tomatoes, however, the product's brand is not always distinguishable, and as a result the quality and price of the product should be decisive. In this paper, we are interested in whether the set price of a good affects the perception of its quality and whether it is possible to use a reasonably adjusted price in the supply chain to increase sales of more expensive tomatoes even if their quality is not significantly higher than the cheaper product offered. A search of the literature has not found any similar such experiment that examines the effect of price on the perception of the quality of tomatoes.

This paper analyzes the behavior of potential customers in different situations to understand the importance that product price plays in the decision making and buying process. To do that, we created an experiment that includes the tasting and evaluation of tomatoes. Afterward, the results of the analysis were interpreted from an economics perspective and were used to improve the efficiency of business selling processes.

LITERATURE REVIEW

As economics, marketing theory, and personal experience suggest, price is undoubtedly an important variable for explaining shopping decisions (Ailawadi et al., 2001; Gázquez-Abad & Sánchez-Pérez, 2009). Indeed, the marketing industry has used pricing strategies to stimulate consumer demand and purchases (Hünerberg & Hüttmann, 2003; Chandon et al., 2009; Kotler et al., 2015; Kienzler & Kowalkowski, 2017). Scholars such as Alford & Biswas (2002); DellaVigna (2009); Huck & Wallace (2015) have made use of common assumptions to observe the effects of prices on customers' decisions making. One of these assumptions is that the shoppers know, to a certain extent, the average prices of the goods they are about to purchase. This, however, does not seem to be the reality, as some of the data suggest that this information varies widely depending on the category of the product, the situation under which the customer is purchasing the goods, in which country the purchase is being made, etc. (Estelami et al., 2001). The importance of price memory, which was noted in Gabor and Granger's (1961) pioneering study of hundreds of British housewives, also is a factor. Many researchers have since tested consumer's price memory. Schindler and Wiman (1989) showed that consumer knowledge of prices might be affected by the format of how prices are presented. Krishna (Krishna et al., 1991) showed that the promotional status of a product influenced consumer's knowledge of prices and Estelami & Lehmann (2001); Monroe and Lee (1999) examined the research design choices used in collecting price knowledge data.

Völckner (2008) claimed that price has two different roles in customers' evaluations of product alternatives: a measure of sacrifice (i.e. the amount of money the shopper must sacrifice) and an informational cue (i.e. quality and status inference).

Scitovsky (1945) noted that price is considered as one of the most important identifiers of quality. From that point of view, then, the word "cheap" can connote inferior quality. In countries such as the United States, the word "expensive" is linked to superior product or service and is becoming a synonym for good quality. The relationship between price

and quality was examined in many researches (Shugan, 1984; Steenkamp, 1989; Lichtenstein & Burton, 1989). McConnell (1968) chose beer as a product that is frequently purchased by consumers and found that price was used as an indicator of product quality. Based on the results of Safitri (2018), price has a positive effect on the brand's image and also on the perception of its quality by customers.

But what about products that can be seen, such as fruits and vegetables? Other important identifiers of quality are found in fruit or vegetable markets. For example, customer choices are influenced by date labeling, deviation in terms of appearance, or damaged packaging. Also, this process is affected by discount preferences, waste behavior, demographics, personalities, and values (De Hooge et al., 2017).

Also in connection with price and its impact on the perception of quality is anchoring, which represents the impact of the prices of other product prices on customer price expectations; that is, the current emotional state and the lack of analysis and comparison of prices of similar products (Holm, 2015). Nunes and Boatwright (2004) found that if anchoring takes place by perceiving the prices of similar products as the target product, the effect is greater, and the price of the target product had a disproportionate effect. They further found that even attempts to reduce the attention paid to potential anchors did not mitigate that effect.

Another point of view that can influence consumers is the origin of the product. Feldmann & Hamm (2015) showed that purchasing local food is less popular than purchasing organic or fair-trade products because, for one, organic or fair-trade products are better known across all social classes.

In theory, the assumption is that people have preferences that they can name and rank, from the most important one to the least important one, when choosing a product to buy (Lusk and Briggeman, 2009; Hjelmar, 2011). These preferences provide the utility that one person will receive, should he or she consume one good, and, based on these utility rankings, they should be able to clearly pick between alternative goods. In practice, however, we see that the decision process is influenced by many

other criteria but is often simplified; liking and price usually end up playing the most important role in purchasing decisions (Lappalainen, 1998).

The purpose of this study is to investigate the relationship between the price and the quality of studying a specific good in the Slovak Republic – tomatoes - because the price of this vegetable has been increasing rapidly in recent years.

RESEARCH METHOD

While the literature preview shows that consumer behavior is an interesting topic to research, and many scholars have examined how knowing prices affects the quality perception of an actual shopping situation (present effect of recognizing the prices of products), we have focused on how people would respond to evaluating additional products of varying quality when they recognized prices of like products before that. As a result, our focus is on the future effects of recognizing prices of products and how these findings can be incorporated in the marketing strategy of shops.

Given our interest, our research aims to analyze how recognition of prices affects consumer behavior, consumers' price estimate of additional products and how our findings can be used in marketing strategy. To achieve this aim, we created an experiment together with a questionnaire.

The experiment involved tasting tomatoes with known prices and then assigning prices to the other tomatoes. We chose tomatoes as the subject of the research because they are known and often purchased products with quality signs that should be the same or at least very similar for all consumers. Using tomatoes also helped us to avoid prejudices that could arise due to different product designs; for example, if we chose notebooks, a participant could estimate the brand of a product based on the design of the device, which could affect the perception of product quality. We cut the selected tomatoes into the same small pieces to make it impossible for respondents to recognize the shape and size of whole tomatoes for this same reason.

Data was collected via an experiment questionnaire, which began with a story about an unnamed company that is currently producing different kinds of tomatoes in two different fields. The tomatoes were tasted by the respondents and they completed the questionnaire and answered individual questions about their price and quality.

The story said that the first field of tomatoes (the first part of the tasting) was cultivated based on established technology and the tomatoes were currently being sold in chain stores at different prices depending on their quality. In the second field (the second part of the tasting), the tomatoes were grown based on a new/developing technological process and they are not available yet for general purchase.

Participants of the experiment were one hundred and six undergraduate and graduate students of a Slovak University. The reason students were selected was twofold. First, they were not experts in the field who might be influenced by their knowledge of tomatoes; our goal was to find out the behavior of the average consumer. Second, the sample is relatively homogeneous, approximately at the same intelligence level with similar consumer experiences, yet, because they are young, also equally inexperienced. The experiment consisted of three parts. In the first part, we asked participants some questions to collect basic information about the respondents and their relationships with tomatoes. Key questions were:

“Write down the price in € you are willing to pay for a 1 kg pack of top quality tomatoes“ and “Write down the price in € you are willing to pay for a 1 kg pack of average quality tomatoes.”

In the second part, participants tasted four types of tomatoes when prices per 1 kg of each group of tomatoes was known – in this case 1.99; 3.56; 5.73; 9.16, respectively (**real prices - RP**). We then asked the participants to rank the order of tasted tomatoes from top quality to worst quality.

In the third part, participants tasted four types of tomatoes, but the actual prices were not provided. Participants were asked to assign prices (**assigned prices - AP**) to these tasted tomatoes.

Groups of tomatoes tasted in the second and third parts of the experiment were the same so that the quality of the tomatoes could not significantly influence the price decision in the third part of the experiment. A false introduction about the tomatoes during our introduction to the experiment was done to reduce speculation by participants that the tomatoes were exactly the same.

Anchoring effect

Nunes and Boatwright (2004), customers perceive the prices of similar products; after knowing the price of the final product, they compare this price with remembered prices and estimate the quality of the product on that basis. This is known as an anchoring effect. We analyzed the presence of the anchoring effect by testing the following hypothesis.

H1: The maximum price a customer is willing to pay for a product of the highest quality affects the perception of current product prices on the market.

An additional question is: Are there attributes that significantly affect the truth of H1?

To analyze H1, we compared the price set in the question “Write down what price you would have been willing to pay for a 1 kg pack of top-quality tomatoes“ (**maximum price limit - MPL**) and the maximum price of APs. H1 is true if AP is greater than MPL. After comparing prices, we created a decision tree model to analyze if some attributes significantly affect MPL after recognizing RP. To create this decision tree model, we used one of the most used algorithms – the J48 decision tree-including algorithm – using Weka software (version 3.8.3). The purpose of the algorithm is to generate rules that are used to predict the final variable. In our study, the algorithm would create rules from the answers in the questionnaire to predict the truth of H1. While the algorithm has many setting parameters, the most important one is the confidence factor that represents the minimal needed percentage of right predicted variables using the tested rule. The algorithm creates as many rules as possible; calculates the percentage of right predicted variables and leaves only those rules that the calculated percentage is higher than the set confidence

factor in the program setting (Kaur & Chhabra, 2014). In this step, the analyzed attributes were answers to questionnaire questions:

- What is your gender?
- Where are you from?
- Do you like tomatoes?

How often do you consume raw tomatoes?

Do you eat tomatoes from the store or homemade/market tomatoes?

In default algorithm settings, the attribute was considered significant if the confidence factor of the attribute was at least 0.25. Descriptive statistics were used to describe the results.

H2: If a customer recognizes the actual prices of products, he will use these prices to estimate the prices of other like products.

We chose the whole research methodology to examine the given hypotheses without side effects, such as the above-mentioned product branding, which could affect the respondents' preferences and would introduce another unknown that could affect the research results. To analyze H2, we examined the difference between AP and the nearest value of RP. Then we abstracted from AP=0 € because in these cases the participants skipped the price making phase; these occurrences of price values are insignificant to confirm the H2. Next, we repeated the analysis with adding rounded actual prices to one decimal place divisible by 0.5 € (2 €; 3.5 €; 5.5 €; 9 €) because participants tend to remember such values rather than the exact actual values. If the population consisted of calculated differences with a mean value of 0 at the significance level $\alpha=0.95$, H2 is true. Descriptive statistics were used to analyze and interpret the results, and, after that, we calculated whether or not the mean of these differences is 0 at the significance level $\alpha=0.95$ using a two-tailed Z-test.

The presence of the anchoring effect would be confirmed if the established hypotheses are not rejected.

Effect of knowing the price to perception of quality

The second aim of this paper is to test McConnell's (1968) claims that knowing the

price of products to customers affects the perception of the quality of these products. If we were to confirm the statement, our goal is to find out whether this relationship is positive, i.e., whether the expected quality of customers increases as the price increases, as Safitri (2018) claims. To test the presence of these effects in our group of respondents, we compared the order of tomatoes determined by the respondents in the second part of the experiment with the recalculated order from the third part of the experiment. From the third part of the experiment, we recalculated the rankings based on the prices determined by the respondents by assigning grade 4 (worst quality) to tomatoes with the lowest assigned price and assigning grade 1 (best quality) to tomatoes with the highest price. If the prices of some tomatoes are the same, they are assigned an arithmetic mean order. For example, if the respondent assigned prices in € to tomatoes 3; 3; 5; 7, the recalculated order would be 3.5; 3.5; 2; 1. We displayed the results and evaluated the presence of the investigated effect according to McConnell (1968) and Safitri (2018).

RESULTS

The results obtained by analyzing the questionnaires that the respondents reported during the experiment are described in this section. The chapter is divided into two subchapters: in the first subchapter we analyze the presence of the anchoring effect, and in the second we analyze the effect of knowing the price to a perception of the quality.

Anchoring effect

In our results, 67 of the 106 participants (63,21%) set at least one higher AP than MPL, so H1 is true for these participants; they are influenced by actual prices on the market to such an extent that they are willing to move their price limit level. As an interesting fact, we consider that 98 of the 106 (92.45%) participants buy tomatoes at least once in two weeks, which means that they come into contact with market prices of tomatoes regularly. As a result, the set MPL by them was based on longer experiences with the prices of tomatoes. Nevertheless, prices that they recognized through the experiment influenced them so much that they changed

their MPL based on long-term experiences only because of their short-term experience in one situation. In the case H1 is true, the greatest relative abundance was 80%; 4 of 5 participants who answered the question “Do you eat tomatoes from a store or homemade/market tomatoes?” by choosing “Only homemade market”.

On the other side, 39 of the 106 participants (36.79%) have not exceeded their MPL, so H1 is false for them. In the case H1 is false, the greatest relative abundance was 66.67%; 2 of 3 participants who answered the question “How often do you consume raw tomatoes?” by choosing “Once a month”. Table 1 shows the results of the analysis of H1 using descriptive statistics.

Table I: Abundance analysis of H1

Attributes	Population		H1 = TRUE		H1 = FALSE	
	Absolute abundance	Relative abundance	Absolute abundance	Relative abundance on attribute	Absolute abundance	Relative abundance on attribute
1. What is your gender?						
Man	32	30,19%	21	65,63%	11	34,38%
Woman	74	69,81%	46	62,16%	28	37,84%
2. Where are you from?						
Town	50	47,17%	32	64,00%	18	36,00%
Village	56	52,83%	35	62,50%	21	37,50%
3. Do you like tomatoes?						
I like them	91	85,85%	57	62,64%	34	37,36%
Neutral	11	10,38%	8	72,73%	3	27,27%
I don't like them	4	3,77%	2	50,00%	2	50,00%
4. How often do you consume raw tomatoes?						
Less often than once a month	5	4,72%	3	60,00%	2	40,00%
Once a month	3	2,83%	1	33,33%	2	66,67%
Once in two weeks	12	11,32%	7	58,33%	5	41,67%
Once a week	17	16,04%	11	64,71%	6	35,29%
More times a week	69	65,09%	45	65,22%	24	34,78%
5. Do you eat tomatoes from a store or homemade/market tomatoes?						
Only from the store	5	4,72%	3	60,00%	2	40,00%
Mostly from the store	24	22,64%	16	66,67%	8	33,33%
50 to 50	54	50,94%	35	64,81%	19	35,19%
Mostly from home/market	18	16,98%	9	50,00%	9	50,00%
Only homemade market	5	4,72%	4	80,00%	1	20,00%

Source: *Authors' calculations.*

From the analysis, if there were attributes that significantly affected the truth of H1 we tried to create a J48 decision tree using Weka software. Using default program settings, the software evaluated that no set attributes have confidence factors of at least 0.25, meaning that none of the

set attributes significantly affects H1. We tried to change the settings of the algorithm and its parameters, but in every tested variant program that was evaluated no set attributes significantly affect H1.

Table 2 show the results of the analysis of H2.

Table 2: Analysis of H2

	AP vs. RP	AP > 0 € vs.- RP	AP vs. RP and rounded prices	AP > 0 vs. RP and rounded prices
Population	424	415	424	415
Minimal difference = 0	54	54	136	136
Relative abundance	12,74%	13,01%	32,08%	32,77%
Mean	-0,21	-0,17	-0,19	-0,15
p	2,72E-12	6,92E-10	5,20E-11	1,19E-08
Mean = 0 (p>0,95)	FALSE	FALSE	FALSE	FALSE

Source: Authors' calculations.

The meaning of the individual labels are:

AP – all assigned prices from the third part of the experiment;

RP – all real prices from the second part of the experiment;

RP and rounded prices – all real prices from the second part of the experiment and their rounded values to one decimal place;

Population – number of calculated differences;

Minimal difference = 0 – the number of differences between AP and nearest RL that are equal to 0;

Relative abundance – the relative abundance of value in “Minimal difference = 0” on the value in “Population”

Mean – mean of calculated differences;

p – the probability of truth H2;

Mean = 0 (p>0,95) – the truth of H2 with the mean of these differences is 0 on the significance level $\alpha=0.95$ using two-tailed Z-test

Each column in Table 2 represents a different version of examining H2. Because of what the Z-test results show, the mean of each analyzed

version is not equal to 0 at the significance level $\alpha = 0.95$, and H2 is false. On the other hand, in the version where we compared AP > 0 with RP and rounded prices, the relative abundance was 32.77%, which is almost one-third of the whole population. This means that in 136 of 415 cases (32.77%) participants remembered prices in the second part of the experiment and, after that, in the price making process. Assigned prices to tomatoes by them were based only on comparing quality and prices of known tomatoes and not on self-created criteria. The results show that the presence of the anchoring effect is observable but not statistically significant.

Effect of knowing the price on the perception of quality

As part of the analysis of the presence of the effect of knowing the price to a perception of quality, we displayed and compared the order of tomatoes determined by the respondents in the second part of the experiment with the recalculated order from the third part of the experiment.

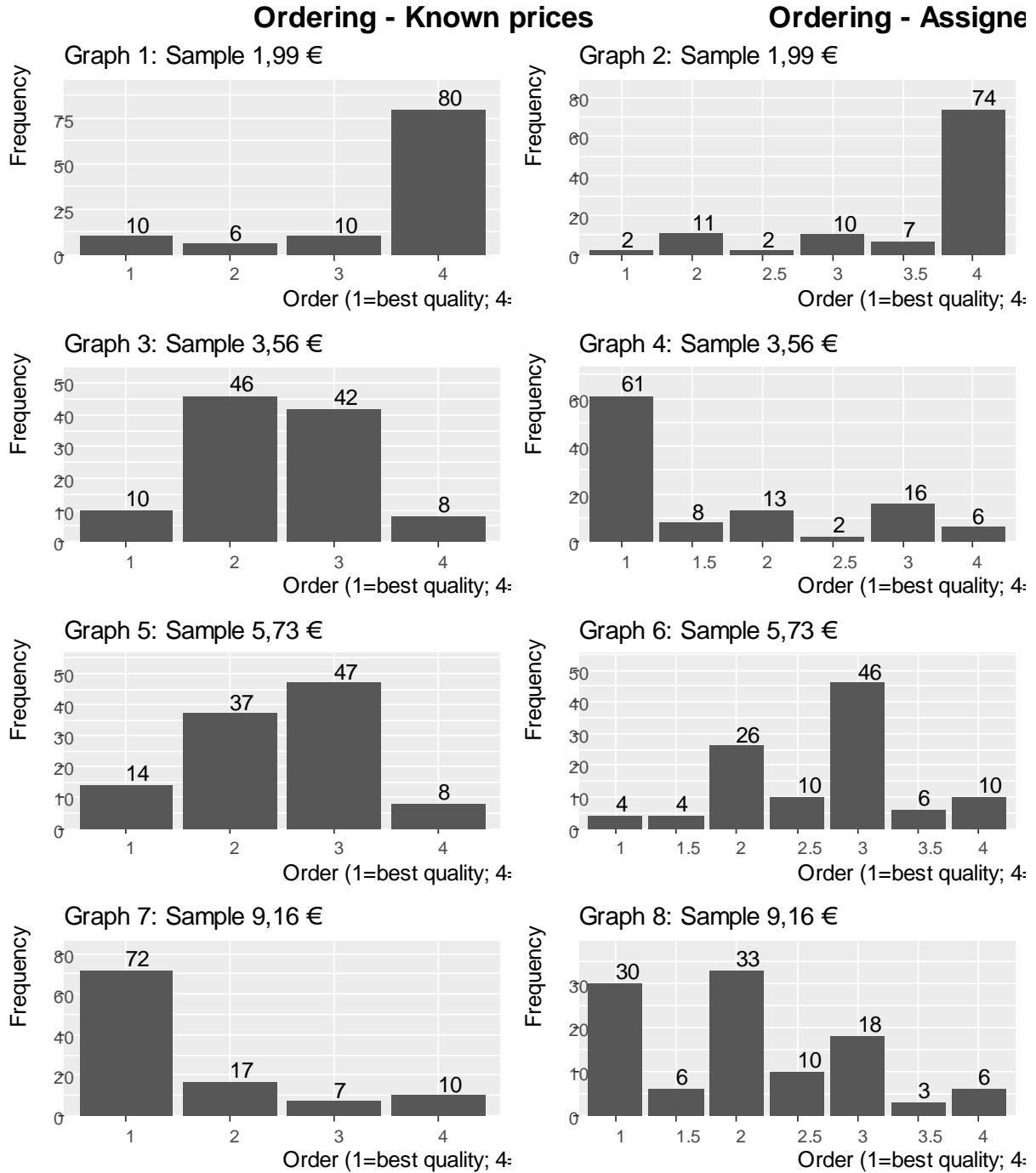


Figure 1: Bar plots: Absolute abundance of ranking tomatoes

Source: *Authors' calculations.*

Figure 1 shows the absolute frequency of order assignments to individual tomatoes. On the left are graphs for the order that the respondents entered in the first part of the tasting when they knew the prices of the

tomatoes. On the right are graphs for the recalculated order of tomatoes from the second part of the tasting, where they assigned prices to the tomatoes.

If we compare the graphs, we find that the assigned prices do not match exactly the order between the parts of the experiment. If we compare graph 3 and graph 4, we see that when the respondents knew the price of tomatoes with a real price of 3.56 €, they evaluated it in the order of 2 or 3, i.e. as a medium-quality tomato among the samples. However, when they did not know its real price in the next part of the experiment, they considered it to be the best. Based on this finding, we can deduce that the respondents' knowledge of the price of tomatoes significantly influenced the evaluation of their quality. We consider this effect to be positive in the sense that the higher the price of the product, the better the customer considers the tomato. This statement can also be observed in Graphs 7 and 8. When the respondents knew that they tasted the most expensive tomato, as many as 72 (67.92%) of the 106 respondents rated it as the best quality. However, if they did not know its price, then only 30 (28.30%) respondents rated it as the best quality.

Various interesting findings emerged from comparing the specific orders that the respondents awarded and knew the price and the derived orders.

Out of 106 respondents, 8 (7.55%) entered exactly the same order in the first and second parts of the experiment - in both parts they entered exactly the same order, e.g. 2; 3; 1; 4. Out of 106 respondents, 14 (13.21%) entered approximately the same order in the first and second parts of the experiment - e.g., in the first part 1; 2; 3; 4 and in the second part 1; 2; 3.5; 3.5. The fact that up to 92 (86.79%) respondents significantly changed the quality assessment of tomatoes based on whether they knew their prices or not confirms the claim that these students were influenced by the knowledge of the actual price when assessing quality.

Of the 106 respondents, 27 (25.47%) in the first part of the experiment gave the order as graduated as the actual known price - they assigned the order 4; 3; 2; 1. Of these 27 respondents, only two (7.41%) entered the same order in the second part of the tasting. This finding proves that the knowledge of the price of tomatoes influenced the entire quality assessment of 25 (23.58%) respondents.

We consider these facts as proof that the respondents' knowledge of the price of tomatoes significantly influenced their perception of its quality

RESULTS DISCUSSION

For a situation in which H1 is true, the greatest relative abundance was 80%; 4 of 5 participants who answered the question "Do you eat tomatoes from a store or homemade/market tomatoes?" by choosing "Only homemade/market". This can be caused by fact that these participants do not buy tomatoes regularly and so are not familiar with actual store prices, and because of that they are more prone to adapt to the actual market situation by changing their price perception.

Due to the statistical results, H1 is globally false. Nevertheless, we consider relative abundance (63.21%) representing H1 is true (regardless of the attributes tested in the decision tree) as significant information. The main finding is that knowing the price affects consumer behavior and its perception of the quality of the product whereas this effect has a positive character. This result is consistent with the results of the McConnell (1968) and Safitri (2018) studies. This finding could be used by businesses not only in the agricultural sector but also in other areas, as consumer psychology and subconscious behavior do not differ in other products. For example, of the possible impact of using the results of H1 in marketing strategy, we introduce two situations:

1. Customers have set MPL of product X at a value of 5 €. Values of variable versions of product X are 2 €; 3 €; 4 €; 4,5 € and 5 €. Customers expect the highest quality in the version of product X with price 5 €, but after recognizing that it does not meet their requirements, customers will buy one of cheaper versions.
2. Customers have set MPL of product X at a value of 5 €. Values of variable versions of product X are 2 €; 5 €; 5,5 €; 6,5 € and 7 €. After customers recognize that the actual highest price of the product is higher than his, he can move up his MPL. After that, even though the version of product X with price 5 € does not meet the highest

requirements, he is willing to buy it because his expectations for this version are lower than in the first example.

The drawback of our H1 analysis is that we abstract from the possibility that the participant exceeded his MPL because in the third part of the experiment he tasted a tomato, which in his opinion had better quality than the best quality tomato he had eaten until the experiment.

Results of our H2 analysis show that H2 is globally false, but we also consider that relative abundance (32.77%) when H2 is true is interesting. Situations in which H2 is true means that a participant has remembered prices (or rounded values of these prices) of tomatoes tasted in the second part of the experiment. The same conclusion was reached by Nunes and Boatwright (2004), where they confirmed the presence of the anchoring effect on a sample of respondents. After that, when they are evaluating tomatoes, respondents compared the quality of tomatoes eaten in the second part of the experiment with the quality of tomatoes eaten in the third part of the experiment. After deciding this comparison, they derived price from remembered prices.

CONCLUSIONS

The motivation for this paper was to find out the answer to the question of whether the perception of price affects the perception of customer quality and how the results of the analysis can be applied in economic practice. We set two hypotheses to reach the aim of this study.

In our work, we examined the anchoring effect on the respondents and compared the results with Nunes and Boatwright (2004). The results showed that the presence of the anchoring effect was present but was not statistically significant. Nevertheless, in the discussion we recommended ways of using this effect in economic practice, because even a statistically insignificant effect can have a positive effect on the economy of a society.

The next result of the analysis of the ranking of tomatoes according to their quality proves that the perception of the quality by the university students was significantly influenced by whether they knew the prices of the

tomatoes being tasted or not. This result is in line with McConnell's (1968) research in which he also confirmed that price was used as an indicator of product quality. Safitri (2018) states that the effect of price has a positive influence on the perception of product quality. The results of our research confirm this statement. This positive effect can be observed in the experiment; if we gave the respondents information about which tomato is the most expensive, they then rated it as the best quality, but when they did not know its price, they often rated it as the second or third best. Businesses can use this fact in the pricing of their products, whereby manipulating the price they will also manipulate the perception of the quality of the product by customers.

The experiment was performed on sliced tomatoes to prevent respondents from linking brand and product, as perceptions of quality would be influenced not only by price but also by product brand. This strategy can also be seen as an implication/limit of the experiment, where the experiment cannot be replicated with products such as smartphones, laptops, and others, in which respondents could guess the brand of the product. The next limitation of the analysis of the hypotheses is that participants were only a narrow specific group of people. Within the experiment, respondents could be selected to represent a larger and more diverse group of customers.

In future research, we plan to repeat the experiment with older participants who likely have more experience with buying tomatoes than students, and after that compare results between these analyses.

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