

**Czech University of Life Sciences Prague**

**Faculty of Economics and Management**

**Department of Economics**



**Diploma Thesis**

**Behavioral Economics**

**Case study of the beauty services consumption**

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## DIPLOMA THESIS ASSIGNMENT

Dauriya Shapikhanova

Economics and Management

Economics and Management

Thesis title

**Behavioral Economics; Case study of the beauty services consumption**

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### Objectives of thesis

The thesis will focus on the topic of behavioral economics questioning and its influence on human decisions.

### Methodology

I will examine the most common behavioral biases and their impact on human behavior. These documented psychological and emotional distortions of human behavior cause, that people in reality do not always act fully rationally like homo economicus. While analyzing survey data from questionnaire, I will study the decision-making process and tendency to undergo selected biases.

## The proposed extent of the thesis

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## Keywords

behavioral economics, behavioral finance, rational behavior, irrational behavior, human factor.

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### **Declaration**

I declare that I have worked on my diploma thesis titled "Behavioral economics" by myself and I have used only the sources mentioned at the end of the thesis. As the author of the diploma thesis, I declare that the thesis does not break copyrights of any their person.

In Prague on 30<sup>th</sup> November 2020

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# **Behavioral Economics**

## **Case study of the beauty services consumption.**

### **Abstract**

Diploma thesis will focus on the topic of behavioral economics and defining the postulates of ownership effect in selected beauty sector. I will describe theoretical background and present own empirical analyses at individual level based on the questionnaire's results. Then I will determine the most common behavioral biases and their impact on customer behavior. These documented psychological and emotional distortions of human behavior cause, that people do not always act fully rationally like homo economicus. Using the empirical evidence from questionnaire I will study the decision-making process and tendency to undergo selected biases. The research examines basic assumptions related to changes in consumer behavior and his decision-making process while choosing the beauty provider of examined sector. In my thesis I will also study the COVID pandemic impaction on consumers' choice and the results will follow up recommendations to the beauty sector in Czech Republic.

**Keywords:** behavioral economics, decision-making process, rational behavior, irrational behavior, assumptions, questionnaire.

# **Behaviorální ekonomie**

## **Případová studie spotřeby kosmetických služeb.**

### **Abstrakt**

Diplomová práce se zabývá tematikou behaviorální ekonomie a definování postulátů efektu vlastnictví ve vybraném kosmetickém sektoru. Ve své práci popíšu teoretická východiska a na základě dotazníkového šetření představím vlastní empirické výsledky na individuální úrovni. Poté určím nejčastější předsudky v chování a jejich dopad na chování zákazníků. Tyto dokumentované psychologické a emocionální zkreslení lidského chování způsobují, že lidé ne vždy jednají úplně racionálně jako homo economicus. Pomocí empirických důkazů z dotazníku budu studovat rozhodovací proces a tendenci podstoupit vybrané předsudky. Výzkum vycházel ze základních předpokladů souvisejících se změnami chování spotřebitele a jeho rozhodovacím procesem při výběru poskytovatele servisních služeb krásy zkoumaného sektoru. Ve své diplomové práci budu také studovat dopad pandemie COVID na výběr spotřebitelů a výsledky budou následovat doporučení pro kosmetický průmysl v České republice.

**Klíčová slova:** behaviorální ekonomie, rozhodovací proces, racionální chování, iracionální chování, předpoklady, dotazník.



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# 1 Introduction

Classical economics is built on the assumption that people are rational. That is, making decisions, they maximize their own benefits. This statement, around which a huge theoretical base is built, seems dubious, if only for the simple reason that usually a person does not possess all the necessary information to make the best decision in a particular situation. But even with the information available, people tend to make irrational decisions. This is what will be discussed in this thesis.

The effects of social, cognitive and emotional factors on the consumer decision-making process are examined in the field of the behavioral economics. The ideas of behavioral economics are not entirely new, they return to the beginnings of economics. Today, this is a direction that aims to supplement psychological realism with mainstream economics. It examines the influence of habits, moods, prejudices, altruism on economic behavior and why, under certain circumstances, people do not behave according to the concept of “homo economicus”.

In economic concepts, there are many different cases that cannot be explained only by rational behavior. But it is possible to solve the behavioral economics, which seeks to deepen the knowledge of economics and give them a more realistic basis, which comes from knowledge of psychology, especially emotional factors of economic decisions of individuals and institutions. It also uses knowledge of anthropology, sociology, neurosciences and cognitive sciences. With behavioral economics, more accurate economic models can be compiled and more accurate predictions, because the behavioral approach reflects a broad psychological reality.

Researchers have focused on understanding consumer decision-making processes but paid not enough attention to how they could use the results of their researches to help consumers make right decisions. Many individual and social problems, such as self-control problems, emotions, influence of reference groups etc. could have impact on the decision-making process. The result is, that the consumer makes incorrect, disadvantageous decision for him – e.g. buys products that he doesn't really need or products that don't meet his actual exact requirements. A deep understanding of consumer behavior, the factors that influence consumer behavior, the rational and irrational nature of decision making is

important to best meet the customer's needs. Satisfied customers are the goal of companies in today's competitive and globalized market, therefore, the research in this field is very topical and important.

Marketing research is being conducted to examine consumer behavior, which today has number of methods and options for interpreting data. Various disciplines meet in this area – psychology, sociology, economics, statistics. Consumer behavior can be examined with the help of various psychological experiments. Modern econometrics provides a sufficient theoretical background for data analysis. There is also a powerful computer technology for their processing. Behavioral economics uses different methods, including experiments, for the purpose of testing deviations from the rational behavior.

## **2 Objectives and Methodology**

The thesis is focused on the topic of behavioral economics questioning and its influence on human decisions. The main attention is paid to the own research of the consumer behavior in the field of beauty services. The reason for choosing this sector is the personal interest in this area, the great potential of the sector (economic and social trends, globalization) and the significant negative impact of the current restrictions caused by the coronavirus epidemic on this area.

### **2.1 Objectives**

The main aim of the thesis is to determine most common behavioral biases and the impact on human behavior in the selected field of consumer segment of beauty services. To reach this aim it is necessary to solve the following objectives:

- to create the questionnaire;
- to verify, if “bait” price supports the sale of a specific product;
- to verify assumption of “anchor” price;
- to verify assumption of irrational behavior when something is “FREE”;
- examine assumptions about changes in consumer behavior due to the COVID pandemic;
- according to given results from the questionnaire, propose recommendations for beauty services providers.

Different factors and biases document psychological and emotional distortions of human behavior cause, that people in reality do not always act fully rationally like “homo economicus”. While analyzing survey data from questionnaire, I will study the decision-making process and tendency to undergo selected biases.

### **2.2 Methodology**

The first part of the thesis is a literary review, that is focused on current theories of behavioral economics and research in the field of consumer behavior.

The second part of the thesis is own research, focused especially on verifying the assumptions described by Dan Ariely in the book “Predictably Irrational: The Hidden Forces That Shape Our Decisions” (2008), relating to consumer behavior. Model questions are created for the target customers of the beauty salons.

Characteristics of this target segment were identified based on the secondary research (available sector surveys). The features of the research sample derived based on these characteristics of the target segment.

The research is focused on obtaining the data needed to validate selected assumptions of consumer behavior.

The pilot version was conducted 1.11.2020. Minor adjustments concerning the wording of the questions have been made. The final questionnaire form was created used Google Forms and online portal Vypnto. The questionnaires were also printed on paper. The link from Google Forms to fill in the questionnaire was send to the available contacts with a request to spread the link further. Questionnaire form on the Vypnto was filled in by the visitors of this portal. The target audience were women, mostly in the age between 18 – 35 years old from Prague.

The part of the own research is also focused on the impacts of COVID on the behavior of consumers of beauty services.

The methodology of the research and setting assumptions are given in the chapters 4.1 and 4.2.

The results of the research will make it possible to find out whether the respondents' behavior is rational or irrational: they choose a variant which, for some reason, seems more attractive to them.

This thesis is based on the analytical methods and uses basic mathematic-statistical methods.

The respondents' answers were transferred to MS Excel, the absolute frequencies of answers ( $n$ ) were calculated. The relative frequencies of answers (%) are the percentage shares of individual types of answers in the total number of answers.

For questions where a 10-point scale was used, the sums of points awarded to all respondents (total score). The average score was calculated as a share of total score

according to respondents on the maximum possible score (usually  $870 = 10 \text{ max.points} \times 87 \text{ respondents}$ ).

There is also a graphical representation of the results and the use of the method of synthesis and induction for the purposes of interpretation of survey results, drawing conclusions and recommendations.



## **3 Literature Review**

### **3.1 The emergence and development of behavioral economics**

The emergence of behavioral economics is linked to progress in microeconomics and psychology. One of the advances that led to the emergence of behavioral economics was the rapid adoption of a model of the expected utility of Neumann and Morgenstern in 1947 as a descriptive model of risk decision-making (Berger,1980). Unlike the general benefit analysis, whose assumptions and implications were relatively flexible and therefore difficult to challenge, the new models were accurate and well testable. As a result, they became one of the first critics of standard theory, such as Allais, Ellsberg and Markowitz, who questioned in articles published in prestigious scientific journals that people behaved according to the principles of mathematical logic and pointed out what later Thaler he called an anomaly (Friedman, Savage, 1948). An anomaly is an empirical result if it is difficult to "rationalize" (reasonably explain) or if we need unreliable assumptions to explain it. The first anomalies, indicating deviations from rational behavior according to neoclassical economics, were observed as early as the 18th century (the St. Peter's paradox), but at that time they were considered to be a kind of curiosity, which perhaps eventually could be explained by standard theory. Anomalies were only given more attention thanks to economic experiments in the 20th century, which allowed them to be accurately verified.

Experimental economics, as a way of exploring economic phenomena, was born in the early 1930s when a group of economists and psychologists tried to experimentally estimate the functions of consumer demand. Gradually, more and more anomalies were verified by experiments, and it soon became apparent that not all "classical" assumptions were correct (Jelveh et al., 2015).

In the mid-20th century, the assumption of unlimited human rationality was also questioned by some psychologists who pointed out the influence of subjective considerations in the decision-making process. There was a significant shift in psychology at the turn of the 1950s and 1960s. This science has left the idea of a brain as a stimulus and response machine and has replaced it with the idea of an 'information processing machine'. The concepts of cognitive psychology about information processing have been of

interest to economic theory, since they have been able to explore neglected issues such as memory functioning, problem-solving, or decision-making. The psychologist Herbert Simon talks about the so-called limited rationality in the early 1960s - people do not choose the absolute best of all, but after comparing some variations, they choose a satisfying, that is, a good enough to meet the minimum level of their requirements. (Borisov, Plekhanov, 2018)

During the second half of the 20th century, criticisms of the traditional view of human decision-making - both in economics and in psychology, were growing, and researchers came up with much fewer intellectual patterns of human decision-making than Herbert Simon's limited rationality.

### **3.1.1 Founders of behavioral economics and their selected work**

In the late 1960s, the collaboration between Tversky and Daniel Kahneman started its historically significant existence. This pair is rightly regarded as the founder of behavioral economics, although many economists have discussed many of the psychological aspects of human decision-making long before them (Smith, Bentham, Pareto, Mill et al.). Since 1948 Amos Tversky has dealt with the issues of behavioral decision-making theory. In the experiments of Edwards, his teacher and professor of psychology, Tversky convinced people that they estimate the probability of the probability differently than it describes the theories of expected utility (Kapelushnikov, 2013).

In the years 1971-1972, Tversky and Kahneman, in the Oregon Research Institute (ORI), explored some of the phenomena present in economic agents' decisions such as anchorage, availability, overconfidence (Heukelom, 2006). It has turned out that people do not just follow the rules of mathematical logic, but also use a large variety of intuitive procedures and mental abbreviations. After completing the ORI research, Tversky and Kahneman spent one-year writing down the results published in the 1974 Judgment under uncertainty: Heuristics and Biases by the prestigious journal Science.

This article can be described as a turning point in behavioral economics and in psychology. Heuristics knowledge is a key socio-psychological knowledge used in marketing, negotiation, etc. What is heuristics? Heuristics is a thought abbreviation in decision making that speeds up human decision making and judgment. Solution heuristic

procedures are often just approximate, based on estimation, intuition, experience, or simply common sense (Tversky, Kahneman, 1981).

### **3.1.2 The process of development in recent decades**

Another milestone in the development of behavioral economics was a conference at the University of Chicago in 1987, which was attended by a large number of top scientists from various fields of social science.

In the 1980s and 1990s, behavioral economics developed wide and, in addition to the benefits of money, was also interested in non-monetary benefits. Daniel Kahneman, Jack Knetsch, and Robert Thaler began to be fascinated by questions of fairness and trust: Why do people share benefits with strangers in some situations and sometimes not? And why do people ever refuse to accept the benefits they deem unfairly low? After all, the standard theory assumed that any benefit is better than none. How do people's bonds of trust arise and what is the role of trust in society and the economy? The questions of fairness and trust seemed to be purely psychological. However, today, thanks to neuroeconomics and anthropology, we know something about the biological and evolutionary background of this issue. Concepts such as trust, fairness are found in many studies at the interface of psychology, economics and sociology on institution building and the consolidation of the stability of economic and social systems (Thaler, Johnson, 1990).

Another new direction in behavioral economics was to define the term “experienced utility”. Daniel Kahneman and colleagues tried to explore the original Bentham idea of the psychological nature of benefits in the form of enjoyment or pain. They recorded people's reactions to various pleasant and unpleasant experiences such as watching comedies, respectively, colonoscopic examination. A remarkable finding was that the memory-retained experience was not judged by its length or overall nature, but by its peak intensity at the time when the experience was over (Kahneman, Smith, 1961).

In the last decade of the 20th century, especially in the second half, behavioral economics has become a recognized sub-discipline of economics. By the end of the century, most of the most important economic departments had a behavioral economist. The number of behaviorally economic articles in leading professional journals has grown

remarkably. In 1997, a special issue of *The Quarterly Journal of Economics*, which dealt with behavioral issues, was published (Kahneman, Smith, 1997).

We have already mentioned some fundamental findings of behavioral economists about how people make decisions - using heuristics or decision-making based on change and not absolute values of benefit. Some of the other important studies that came out after the publication of the famous Tversky and Kahneman article will be presented later in the text. Now that we have a historical excursion and an overview of selected substantial researches, we can try to briefly define behavioral economics and give its basic principles.

### **3.2 Definition of behavioral economics, relation to classical economics**

There is no definition of behavioral economics that precisely defines what behavioral economics is and what is no longer included in this discipline. Behavioral economists are mostly confined to the concept of limited rationality as the main defining feature. They mention the issues of decision-making in terms of risk, or the definition of psychological application in behavioral economic models is mentioned.

The definition of Diamond and Vartiainen is appropriate: “*Behavioral economics is a series of approaches that seeks to broaden the framework of standard economics and incorporate the features of human behavior that are lacking in standard economic theories.*” (Diamond, Vartiainen, 2007). This definition implies a relationship between behavioral and classical economics. According to the previous text, behavioral economics might seem to seek to break down its traditional adversary and replace it. As mentioned earlier, according to Burnham, behavioral economics towards the neoclassical opposition is. Researchers from these contradictory opinion camps are not communicating with each other, thus limiting the development of economic science in general. However, there is generally a different opinion in literature. Behavioral and neoclassical economics are not implacable enemies. On the contrary. (Zafirovski, 2017).

Behavioral economics seeks to improve existing economic approaches, as evidenced by the definition of Francis, Madden, Borrer: "Behavioral economics is a hybrid research area that incorporates principles, concepts and ideas primarily from psychology

(but also from other social sciences such as sociology, philosophy, and in other words, the behavioral approach puts new variables and new uncertainties in simple economic models (Francisco, Madden, Borrero, 2009).

Behavioral models contain more empirically determined parameters and reflect the observed behavior patterns of real people. We can still think that one is trying to maximize his benefit. At the same time, however, it is necessary to take into account the new factors that manifest themselves in the perception of the benefit – eg the difference in motivation between people or errors in perception and in the evaluation of benefits.

In addition to unstable preferences, limited rationality (introduced by Herbert Simon), the imperfect processing of information and the irrational expectation of behavioral economics is still based, for example, on these assumptions and concepts:

- non-egoistic behavior (eg. altruism) – opposes one of the main hypotheses of neoclassical economics – self-interest. Behavioral economics says self-interest has its limitations;
- emotions, ethics, justice, well-being, social preferences;
- intertemporal choice;
- deciding under risk or uncertainty;
- balance – the central question of behavioral economics, which implies that this new discipline is not limited to individual decision-making, but also analyzes the market.

### **3.3 Rational and irrational behavior in economics**

This chapter will explain the difference between rational and irrational behavior of an individual. Some theories illustrating a new view of the rational behavior of an individual in the real environment will be briefly introduced. At the end of the chapter a new branch of economics, so called behavioral economics, will be introduced.

### 3.3.1 Rational behavior

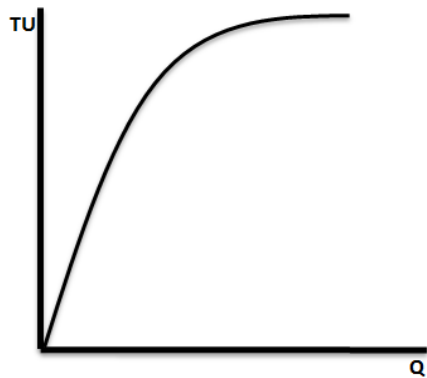
The dictionary of foreign words defines the word “rational” as follow (ABZ.cz: dictionary of foreign words, 2017):

1. sensible, reasoned,
2. purposeful, economical.

The second meaning of the word rational could be derived from the meaning of the first. For example, if an activity is expedient or economical, it is obvious that it was carried out by a person who, before doing, was reasoned and purposeful - rational. In economics, which is the science of how people make decisions and the consequences of their choices (Happy, 2014), the word is used in conjunction with the theory of rational choice (Fine, Milonakis, 2003). The theory of rational choice originates in neoclassical economics (Banerjee, Murphy, 2011), and according to it individuals try to maximize returns and minimize costs. When an individual decides, he first weighs the expected returns and compares them with the expected costs. Consequently, he chooses the one that will benefit most (Martínás, Reguly, 2012).

Usually, the word utility can be encountered in the context of ascertaining the benefit or benefits of a particular activity or use of a product. In economics, the use of the word utility has essentially the same meaning and can be defined as a subjective sense of satisfaction arising from the consumption of individual goods (Macáková et al., 2003, p. 48). It is also important to add that emotions are absent from this definition because they are too complex, elusive and unmanageable (Jarboui et al., 2012). The actual function of the utility can be seen in figure 1, which illustrates the dependence of the utility on the amount of goods (Hořejší et al., 2010, p. 53). It can be seen from this function that the benefits of the consumed goods are increasing overall, but the rate of growth is gradually decreasing. This decline may even reach the point where total utility begins to decline to a negative state (Hořejší et al., 2010). However, this phenomenon will no longer be addressed, as its further development is not so essential now.

**Figure 1: Utility function**



Source: Hořejší et al., 2010

From the theory of rational choice and hence the mentioned theory of utility comes the term *Homo oeconomicus*, which is an individual who acts absolutely rationally. Its properties are as follows: *Homo oeconomicus* comes into situations in which it has to make decisions with exogenously given and determined preferences. These preferences apply to goods and services that are produced, consumed and exchanged. *Homo oeconomicus* is self-centered, caring only for personal interests consisting of goods, work and leisure. *Homo oeconomicus* is result-oriented, taking care of social interaction only to the extent that it affects its final consumption and wealth. *Homo oeconomicus* has a measure of time preferences that allow it to allocate consumption over time in a consistent manner, reflecting its well-being and concern for the well-being of future generations (Gintis, 2000).

*Homo economicus* is therefore characterized by several characteristics that serve to better understand the market (Toth, 2013) but are not entirely authentic (Gintis, 2000). That is why the theory of rational choice and hence the characteristics of *Homo oeconomicus* is often the target of criticism (Whalley, 2004; Marinescu, 2012), because the individual seems like a robot that thinks only about itself and does not make wrong decisions. The rational choice theory suggests that when two individuals who have exactly the same options are placed in a certain situation, they decide exactly the same (Emescu, 202). However, it is obvious that this is rarely done, as suggested by empirical research (Caplan, 2000; Whalley, 2004). Because of these reasons, the concept of irrational behavior has emerged and comes to the forefront of economic science.

### 3.3.2 Irrational behavior

The dictionary of foreign words defines the word irrational in two levels (ABZ.cz: dictionary of foreign words, 2017):

1. Out of reason, incomprehensible by reason
2. Contradictory reason, antisense, absurd

From the above-mentioned meanings, it can be concluded that irrational behavior could be called even foolish or mentally disturbed. However, such extreme names need not be treated. For irrational behavior in economics means only the opposite of rational behavior, that is, in accordance with the theory of rational choice. Just after economists realized that people generally do not behave rationally, various discussions and theories began to emerge about how irrational behavior differs from rational behavior and what role can be played by sociological or psychological factors.

One of the first scientists to study how economics could be linked to psychology was Hoyt (1926), who introduced the concept of objective rationality. According to this, an objective rationality can be called a situation where the following three conditions apply at the same time: a) the individual owns the information on the basis of which he acts b) the individual is willing to use this information, either knowingly or unconsciously (Hoyt, 1926). Simon was one of the first scientists to directly question the assumption of absolute rationality of an individual. In fact, Simon introduced the concept of so-called limited rationality, which is very similar to the concept of objective rationality by Hoyt. According to him, rational behavior is limited by three factors: a) information is limited b) individual motivation of an individual c) limited capacity of human thinking (Simon, Ricciardi, 2000).

If the three conditions of objective rationality from Hoyt are compared with the three factors of Simon's limited rationality, it can be deduced that they are essentially the same factors. Hoyt mentions in the first condition the information on the basis of which the individual acts, while Simon mentions the factor when all the information is limited. The authors probably mean that the individual does not have access to all the information and therefore has only some basis to evaluate and decide. The second condition of Hoyt, the



ability of an individual to use information, can be linked to the second factor of Simon that the rational capacity of human thought is limited. Obviously, both authors argue that the individual is limited not only by the available information, but also by the ability and maturity of his or her reason and thinking to process this information. The third condition with Hoyt is the willingness to use the information, either consciously or unconsciously, with Simon being the third factor of individual motivation. Obviously, both authors argue that an individual's decision-making also depends on what goals it has and what forces it to deal with the problem at all.

For modern writers, for example, Marinescu (2012) extends Simon's limited rationality by dividing obstacles that do not allow individuals to make rational decisions into endogenous and exogenous. Endogenous barriers are those that limit the acquisition and processing of information and that arise from within the individual. Exogenous obstacles then represent the complexity of the decision context and are based on the individual's external environment (Marinescu, 2012).

Toth (2013) tries to distinguish rationality from irrationality by separating logical acts from illogical ones. They argue that logical deeds are those that link resources with a goal through a logical connection that looks logical not only to the individual who makes the decision, but also to the independent individual, that is, the outside. For these logical actions, the objective goal is the same as the subjective one (Toth, 2013). Toth, by subjective goal, seemed to mean one that the individual making the decision could clearly identify and perceive. An objective goal, on the other hand, is one that is perceived and identified by an individual from outside. The logical act in this case, therefore, occurs when the goal that an individual seeks to achieve in a given situation must be well visible to other individuals. Furthermore, according to Toth, illogical acts are those where there is no objective link between the means and the target and where, moreover, the objective target differs from the subjective target (Toth, 2013). Thus, an illogical act occurs when the subjective goal that an individual seeks to achieve is not obvious and identifiable to other individuals.

Toth also adds that the gap that separates the subjective evaluation of the connection of decision with its objective and objective reality admits four causes of illogical decision: habits and customs, prejudices, instinctive behavior and utopian plans (Toth, 2013).

Obviously, these reasons for the illogical decision create a veil that prevents other individuals from identifying the goals of the individual making the decision. If one does not know the customs and customs of a given culture at all, it is difficult to understand why the individual behaves in a certain way. If an individual while making a decision has some prejudice against something, and these prejudices are unknown to others, again its motives can hardly be understood. Likewise, instinctive behavior (anger, sexual lust, etc.) can distort the individual's real goals. Last but not least, utopian plans and excessive imagination can create the impression that other individuals are acting irrationally and do not do what would otherwise seem logical to their surroundings. It can be added that these obstacles, referred to by Toth, can be categorized into endogenous and exogenous categories according to Marinesco (2012). Endogenous can be attributed to prejudice, instinctive behavior and orthopedic plans, since they all come from within the individual. Conversely, the habits and customs of exogenous ones can be assigned, as they are based on the external environment of the individual.

Sunstein (2000) further summarizes the reasons for irrational behavior, arguing that, according to the economic theory of rational choice, there is only one way to make a rational decision, but on the other hand there are many ways an individual can make an irrational decision (Sunstein, 2000). This statement has been briefly expressed in the preceding paragraphs, which outlined several possible ways in which an individual can achieve irrational behavior. As Sunstein argues, there is more to travel than those mentioned here. However, these may be divided into many others, and although the authors may differ in the individual causes of irrational behavior, they all point to somewhat identical points, which will now be briefly summarized into four categories.

The first category is information, its acquisition and processing. By Pudil (2015) the individual will never have all the information they need to make a decision. If he had them, it would not be a decision, but a clear conclusion in advance (Pudil, 2015). But then people would behave as a machine. However, this is not the case, and the problem of information will always be there, and hence the problem of irrationality. The second category is the individual's intelligence and ability, which restrict the processing and handling of the information in an appropriate manner. These include IQ, talents, talent. All of this has a great impact on making decisions. The third category is internal motivation and internal reasons why an individual act as he does. Surroundings do not see these factors. In this

respect, one can agree with Thagard and Nisbett (1983) who claim that people should not judge other people and say that they behave irrationally until they have empirically verified what they do when they violate the normative standards in rational choice theory (Thagard, Nisbett, 1983). Thus, although the surroundings may seem irrational to the individual, they may be logical and rational for the individual, for he may have rational motives for them. Therefore, it is necessary to approach a person's behavior with caution. The fourth problem is the context of the situation. Each situation is different, and it is not possible to prepare for one hundred percent, which means that situational conditions alone may force individuals to act irrationally. An example could be a situation where an individual who prefers to use a smartphone actually uses a button telephone. Until the surroundings find that the individual does not have enough money to buy a smartphone, his or her behavior may seem irrational and illogical.

After reading the above paragraphs, the question may arise as to why the rational choice theory and the Homo oeconomicus theory are used at all, when these theories are more utopian than exemplary of reality. It is clear that these models are difficult to apply to real situations in the ordinary life. However, the idea of rationality is particularly important for economists, or at least for mainstream economists. Rational choice theory is the starting point for what economists do after all: they add a non-trivial explanation to the trivial explanations of certain phenomena. For this reason, there could be no science of economics and without economics one would not be able to distinguish rational behavior from irrational. Thus, the presence of irrationality in human decision-making does not deprive economics of its usefulness and importance. The assumption of rationality only allows economists to say more than they would be able to say without it, and moreover adds some sort of elegance in explaining an individual's behavior. It can therefore be stated that the theory of rational choice is not superfluous (Fine and Milonakis, 2003; Marinescu, 2012; Št'astný, 2014).

Nevertheless, there are emerging opinions that economics needs new conceptual hypotheses, new models and new paradigms. It would need to undergo a conceptual transformation, which could include elements such as emotions, moral hazard, social factors, etc. However, this would not only change the microeconomic models of consumer behavior but also the macroeconomic models. They also do not work according to theoretic assumptions in the real environment. This can be illustrated by the example that in 2008

these models failed to predict the financial crisis. However, according to Marinescu, this was normal and not surprising, as these models, like the rational choice model, were based on poor assumptions (Marinescu, 2012).

Would economic theory therefore not make more sense if it were based on how people actually behave and not how they should behave (Ariely, 2009). One proverb says that a wise man will learn more from a fool than a fool will learn from a wise man. Applying this proverb to the issue of rational and irrational behavior, the following conclusion is drawn: if economists refused to accept the irrationality of human behavior, they would prevent economics as a science from moving forward in their knowledge (Šťastný, 2014). Fortunately, however, economists have accepted the reality of irrational behavior, and for this reason a new offshoot of economic science called behavioral economics has emerged.

Nevertheless, there are emerging opinions that economics needs new conceptual hypotheses, new models and new paradigms. It would need to undergo a conceptual transformation, which could include elements such as emotions, moral hazard, social factors, etc. However, this would not only change the microeconomic models of consumer behavior but also the macroeconomic models. They also do not work according to theoretic assumptions in the real environment. This can be illustrated by the example that in 2008 these models failed to predict the financial crisis. However, according to Marinescu, this was normal and not surprising, as these models, like the rational choice model, were based on poor assumptions (Marinescu, 2012).

Summarizing the chapter about Rational and irrational behavior, we can say that it was explained by manifestations of rational and irrational behavior within economics as a science. Maximizing utility is considered as an essential prerequisite for a rationally behaving individual or so-called *Homo oeconomicus*. It is characterized by characteristics that, however, differ significantly from those of an individual situated in the real market environment. For this reason, from the beginning of the 20th century, opinions began to emerge, according to which so-called soft factors, such as emotions, psyche, social factors, culture, love, habits or traditions, entered into the maximizing benefit of an individual. Over time, these claims have created a new offshoot of economics, the so-called behavioral economics.

Behavioral economics deals mainly with how an individual actually behaves in the real world as effectively as possible in the real world. This does not mean, however, that the assumption of maximizing the benefits of Homo oeconomicus belonging to classical economics has ceased or ceased to be used. This assumption continues to be used by economists, learning in economically oriented schools, and it can be said that it is still a solid foundation for classical economics. Thus, behavioral economics is rather complementary to classical economics, with classical economists asking questions from one angle and behavioral economists from the other.

### **3.4 Ownership effect**

This chapter discusses the ownership effect, its theoretical and practical delimitation. Then there are described the causes of its origin and at the end are listed factors that can affect its strength.

#### **3.4.1 Definition of ownership effect**

Thaler (1980) defines the ownership effect as a situation where people demand much greater consideration for what they should give up and, on the contrary, are unwilling to spend a lot of money on the same thing but not in their possession (Thaler, 1980). Morrison (2000) also gives a definition of the ownership effect, according to which it is a disparity between willingness to pay and willingness to accept – a situation where the price at which an individual would buy goods is less than the price at which the same would goods sold (Morrison, 2000). Huck et al. (2003) further explains the ownership effect as a phenomenon where people give more value to the things they own (Huck et al., 2003). Maddux et al. (2010) describes the ownership effect as a tendency of owners (potential sellers) to value things more than potential buyers (Maddux et al., 2010). Finally, Tomiura et al. (2013) describes the ownership effect as asymmetry in the willingness to pay / buy and the willingness to accept / sell (Tomiura et al., 2013). Although these definitions may seem at first glance different, they all retain the same essence, pointing out that people do not just want to give up the thing in their possession, and vice versa, they are not willing to spend so much money on the same thing, unless it is in their personal possession.

The ownership effect probably originated in ancient times, when the tribes negotiated with each other. In these situations, individuals developed preferences for the things they owned because it helped them in business-oriented situations. And it was the ownership effect that improved the individual's position in the negotiations, and as a result, individuals who had this effect had a better chance of surviving and gaining more wealth (Huck et al., 2003). However, the effect of the ownership effect did not exist only in ancient times, but it can be observed today, both in real situations and in laboratory experiments. Regarding real situations, an example is the market for so-called reverse loans. Reverse loans are contracts in which homeowners sell their ownership back to the bank and exchange it for annuities, which often includes life insurance. These contracts appear to be sensible tools if an individual is risk averse and wants to mitigate consumption throughout their life cycle. Although reverse loans have been available in the US since 1981, there has been little demand so far. The ownership effect can be an explanation for the low demand for these loans, as it could theoretically lead house owners to attribute excessive value of their ownership which the bank is not willing to accept (Huck et al., 2003). As for the experiments, a few of them were carried out for the ownership effect. One of the first investigated how many dollars the duck hunters were willing to spend to prevent the loss of a potential hunting ground and how much they were willing to spend to give up the actually owned hunting ground. In the first case it was only \$ 247, while in the second it was \$ 1044 (Kahneman et al., 2008). Carmon and Ariely (2000) also made an interesting observation when they looked at the purchase and sale prices of National Collegiate Athletic Association basketball tickets. Students who had the chance to get a free lottery ticket were asked how much they would be willing to sell. Students who did not win the ticket and could not participate in the match. The question for them was how much they would be willing to pay for the ticket. Ticket holders reported up to four times the price of ticket sales on average for students who did not own the ticket (Carmon, Ariely, 2000; Ariely 2009).

Perhaps the well-known experiment was conducted by Kahneman et al. (1990) with coffee mugs. Ty Kahneman et al. to each student in the classroom. When students were asked to give a value for which they would be willing to give up the mugs, it was found that this was on average two and a half times the value given by the remaining students

who did not own the mugs (Kahneman et al., 1990). It is also interesting to note that the ownership effect has also been studied in children, and it has also manifested itself here. More remarkably, however, it has been observed in laboratory experiments even in primates, namely Capuchin monkeys. These exhibited many typical features of human economic behavior, such as loss of aversion and consequent ownership effect (Apicella et al., 2014).

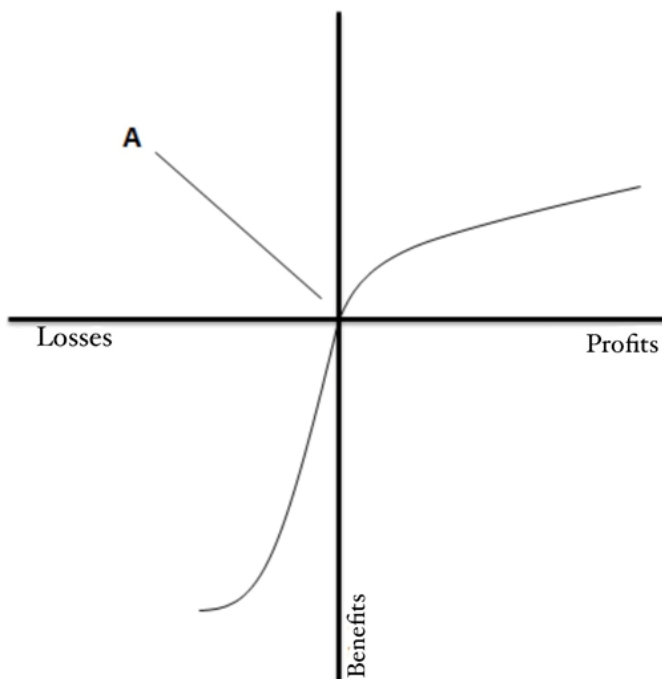
For the reasons mentioned above, the ownership effect seems to have begun to be used directly for business or marketing purposes. Thaler (1980) claims that the ownership effect may be behind some marketing strategies. This is exemplified by companies that use a trial period of products (for example, two weeks) with the possibility of returning money for goods purchased by an individual (Thaler, 1980). Obviously, companies know that once an individual buys a good, it is no longer easy for them to give up. Although he may not be satisfied with it, he gets used to it, makes use of it and is convinced that he will no longer invest funds to return the goods (journey to the store, efforts to negotiate with the seller, ...). Thaler further illustrates this marketing strategy on the example of photographic companies (such as Fotomat). They have a policy to process and print any photo, no matter how badly they are exposed. Customers can request a refund (on their next visit if they are interested) for any photo they are not satisfied with. And it is precisely the ownership effect that helps explain why these companies are not basically bothered by customer requests for refunds of poor-quality photographs (Thaler, 1980).

### **3.4.2 Causes of ownership effect**

The most common explanation of the origin of the effect is the prospect theory. Prospect theory was introduced in 1978 by Daniel Kahneman and Amos Tversky as an alternative theory to the expected benefit theory that has long dominated risk decision analysis and which has been accepted as a descriptive model of economic behavior. The prospect theory is specific to its value function, which has the shape of the letter S, as can be seen in figure 2. This function is concave with a slight slope for the gain area, and convex for a loss area with a steeper slope than in the profit area (Kahneman, Tversky, 1979). It will now be illustrated on the example of owner, buyer and mug, how this function gives rise to an ownership effect.

Let there be an individual who owns a cup and a buyer who would like to buy this cup. Both are in point A in this situation, as can be seen in figure 2. Point A represents the initial state, the so-called reference point at which the individual is located and in which he makes a decision. For the owner, the sale of the goods would be a loss, the purchase of the goods would be a profit for the buyer. However, will the owner's pain of losing the goods be equal to the buyer's happiness of the goods obtained? The maximum amount that the buyer would be willing to pay to obtain a cup should be equal to the minimum amount that the owner would have required to give up. However, as mentioned in the previous paragraphs, life situations and experiments have shown that this is not the case. The answer to the question is therefore that the owner's loss and merchant's happiness will not be equal. According to the value function, the negative benefit caused by the sale of the cup will be greater than the positive benefit caused by the purchase of the same cup. This phenomenon is due to the aforementioned steeper slope of the value function in the area of loss and is called aversion to loss, and is considered a major component of prospect theory (Kahneman and Tversky, 1979; Morrison, 2000; Reb and Connolly, 2007; Kahneman et al. al., 2008; Morewedge et al., 2009; Maddux et al., 2010).

**Figure 2: Value function**



Source: Garland et al., 1990



However, the theory of prospects and thus aversion to loss is not the only explanation for the occurrence of an ownership effect. Over time, further studies have been conducted and the authors have sought to find further explanations. A growing number of studies suggest that the ownership effect may arise because of the mere ownership of the object. Indeed, evidence suggests that merely possessing an object can trigger an association between the object and itself, which in turn increases the perceived value of the object (Tom, 2004; Maddux et al., 2010). This means that reporting high selling prices does not have to be caused by the fact that an individual is afraid of simply losing an object. Obviously, individuals can declare high sales values on the basis that they love the subject and mean something to them, or the object embodies their self in some way. However, it remains prospect theory the most important theory explaining the origin of the ownership effect.

### **3.4.3 Factors affecting the strength of the ownership effect**

Several significant factors can affect the ownership effect. Age could be considered the first. Harbaugh et al. (2001) investigated the effect of this factor, but their results did not suggest that the rate of ownership effect was age dependent. However, this conclusion is not in line with the earlier assertion that the ownership effect is a mere error or anomaly related to the lack of market experience. On the contrary, it confirmed the hypothesis that people have dependent preferences that cannot be changed by repeatedly putting an individual into situations in which they have to give up or acquire goods (Harbaugh et al., 2001). A similar view is shared by Kahneman et al. (2008), who deduce from their mug and pen experiment that there is no indication that the participants would agree on the same purchase and sale price after several rounds (Kahneman et al., 2008). Age, therefore, does not seem to influence the power of the ownership effect. The ownership effect is probably the same in both children and seniors.

It is also worth mentioning the time factor. Strahilevitz and Loewenstein (1998) found that the rating of an object may increase with the length of ownership. This is mainly due to increased adaptation, ie psychological habituation to a new state in which an individual owns something. It is possible that feelings of ownership have intensified over time, leading sellers to set higher selling prices (Strahilevitz, Loewenstein, 1998). The same conclusion was reached by Peck and Shu (2009), who claim that the sense of

ownership increases the longer the individual owns the object. Subsequently, the rating of the object increases significantly (Peck, Shu, 2009). This, as already mentioned in Chapter 2.1, is used by companies in relation to the product trial period. The longer this period is, the less likely it is that the product will be returned even if it does not satisfy the individual.

The type of goods may also have an effect on the ownership effect. Novemsky and Kahneman (2005) found that the ownership effect is reported for goods that are owned for consumption, but not found for goods that are used for exchange and whose surrender is perceived as intentional and not loss (Novemsky, Kahneman 2005). The same view is held by Peck and Shu (2009), who argue that items that are used and exchanged frequently by an individual, such as money, may be genuinely owned by the individual but may still be subject to low perceived ownership by the individual. In turn, this may result in the individual not giving up feelings of loss when they give up (Peck, Shu, 2009). This is understandable because the individual knows in advance that he or she will not possess it forever, or that he will have to surrender it once.

Feelings associated with ownership of the object could be another factor. Lerner et al. (2004) found that the sales prices set by the owner of the object fell rapidly when the ownership of the object provoked dislike. It is possible that the experience associated with reluctance has prevented the development of feelings of ownership and has therefore led to lower pricing (Lerner et al., 2007). Corresponding to this finding is Loewenstein and Issachroff (1994), where in their experiment individuals who owned an object received as a reward for successful achievement rated the object with a higher value (Loewenstein, Issacharoff, 1994). Obviously, a person who acquires an object by his or her own will appreciate it more than obtaining the same object, for example, as a gift in which one's work, sweat and blood are not hidden.

The last factor influencing the power of the ownership effect mentioned here is touch. Peck and Shu (2009) studied the significance of this factor and found that the ability to touch an object increases the sense of perceived ownership of the object. This feeling is amplified by the fact that the feedback connected to the touch on the object is neutral or positive. They also suggested that one feature of almost every ownership effect experiment is that buyers (non-owners) and sellers (owners) could physically hold the object being

exchanged, which may then affect the reported higher selling prices of owners. The use of this finding could also be seen in the real world. Indeed, in 2003, the US Attorney General of Illinois even issued warnings to people who set out to buy, especially during the holidays. He warned them not to watch out for sellers who encourage customers to hold products in their hands and imagine them as their own. This warning was probably based on the fact that the combination of physical possession of an object and the concept of ownership could lead to unscheduled or unnecessary purchases (Peck, Shu, 2009).

Research on the power of touch during shopping was also stimulated by online purchases and online auctions, which have increased significantly in recent years. Marketers are interested in making up for consumers a touch that is unavailable when shopping online. A significant finding about this problem was that in an environment where product could not be touched, such as an online auction, the idea of ownership was amplified by the amount the buyer was willing to pay (Peck, Shu, 2009). The longer a participant in an auction comes first with the highest amount, the greater his / her feeling of ownership of the item will be because he / she will think that the item is his / her own. Eventually, when it is overtaken, the individual will be willing to bid more and more money because of the ownership effect, since he will no longer want to lose his item, even though he never actually owned it (Ariely et al., 2004). It can therefore be seen that even virtual and potential ownership can induce a strong degree of ownership effect in an individual. This effect therefore has a huge impact on the individual's life and rightfully belongs to the field of behavioral economics as it cannot be explained by the traditional postulates of the economic theory of rational choice.

As a conclusion, the ownership effect is considered as an expression of the irrational behavior of the individual. It has been described as a situation where the owners of the subject give this subject an excessive rating compared to those who do not own the subject. Furthermore, the main psychological aspect underlying this phenomenon, the so-called aversion to loss, which is part of the prospect theory, was introduced. According to this, the individual assigns more value to losses than to equally large profits. In addition, possible factors that may influence the strength of the reported ownership effect were presented. Specifically, factors such as the age of the individual, the time associated with the ownership of the object, the type of the object, the feelings associated with the

ownership of the object, or, finally, the possibility to touch the object with their own hands were mentioned.

### **3.5 A two-system approach in a decision making**

Theory of perspectives offered an excellent decision-making model that was able to “squeeze” the Expected Utility Theory, becoming a better and more complete descriptive theory.

The theory of prospects had a solid empirical foundation: it was derived from the results of numerous experiments. In the same way, information on heuristics and biases was obtained. Doubts about their objective existence were almost gone. However, the basic theories of PE, although they answered in a new way to the question “how?”, Did not give an answer to the question “why?”. The theory of perspectives, mental accounting, dozens of biases were already well-known, it was clear how all this worked. But the reasons why such processes arise and proceed in the human mind were not completely clear.

The solution to the problem was proposed by the early 2000s, Daniel Kahneman. It was a concept based on many years of research in the field of psychology, as well as on new achievements of PE, called a two-system approach (the term has not yet been established, in English literature it is often called “Two-system approach” or “dual-system approach”).

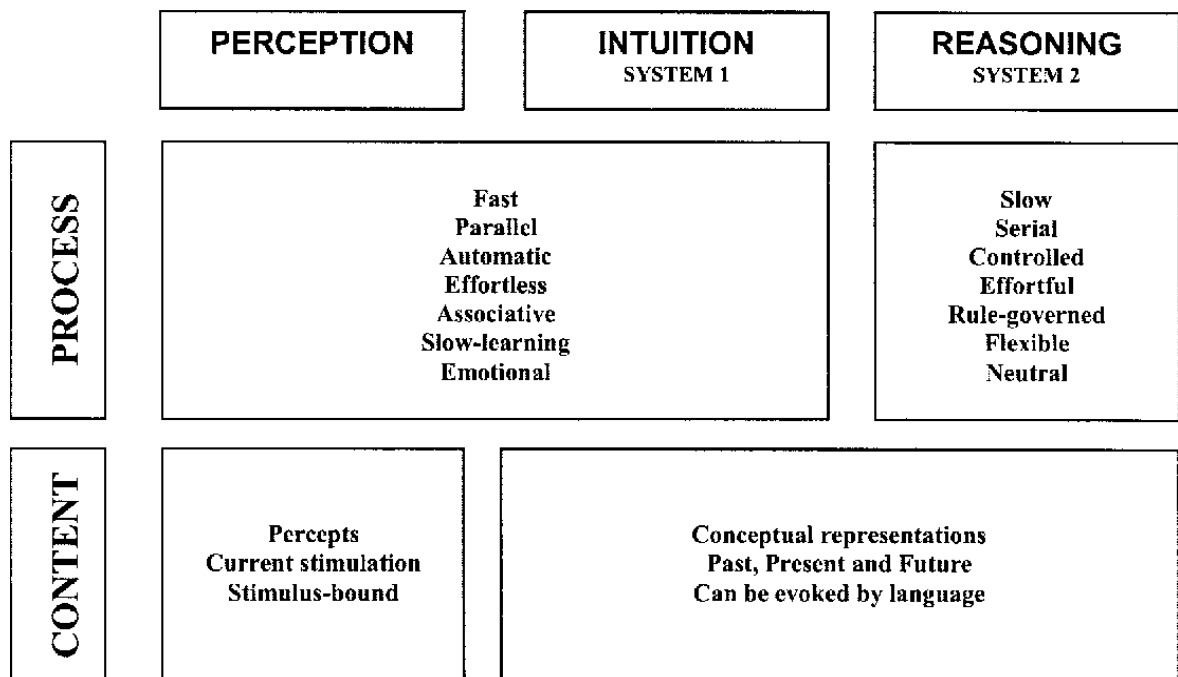
The concept was based on a long-standing idea of human the psyche, as a combination of conscious and unconscious components, which originates in the works of Sigmund Freud.

In cognitive psychology, there is the concept of “theory of the dual process”, which describes cognitive processes in the same way: as a combination of conscious and unconscious activity of the human brain. Most cognitive processes occur unconsciously, and only a small part of them go into the conscious sphere. The intuitive (unconscious) part is usually called system 1, and the rational (conscious) part is called system 2.

It should be noted that Kahneman focuses on the fact that the name of the systems is precisely system 1 and system 2, and not intuition and rationality, since they are not completely identical to these concepts. It is assumed that the two systems developed in parallel. System 1 basically has the biological evolutionary nature of man. In one form or another, it exists in most living organisms, and instincts, for example, function at its level. Kahneman applied this idea to the question of how the perception and processing of information affects choices in conditions of uncertainty and tried to connect this with the behavioral theory of decision making. He proposed the following scheme, in which he reflected the basic provisions of this concept (see figure 3).

Such an understanding of the nature of information processing allows us to see the causes of some distortions and heuristics, to penetrate the psychological essence of these phenomena. The process of perception occurs lightning fast and unconsciously. The senses transmit the signal to the brain at the very moment when it is received. Most of the information has no value for a person, and it is obviously not processed hiding as unnecessary.

**Figure 3: Maps of bounded rationality**



Source: Kahneman, 2003, p. 1449

Most of the information received will be processed at an intuitive (automatic) level, since a conscious analysis of the received pulses is not required. System 1 is a combination

of a huge number of algorithms that are implemented in our subconscious mind: these are almost all reactions to external impulses that do not require a logical (conscious) understanding. System 1 is incredibly effective, moreover, without it is impossible to imagine the full functioning of man - it is an integral part of our nature, formed in the process of evolution.

When a person needs to consciously make a decision, he “turns on” System 2. This usually happens when a decision is made under conditions of uncertainty. But mostly, we are faced with typical tasks that do not require deep analysis, and we are not ready to spend too much time on this. As a result, the information processing process partially proceeds in each from two systems.

The perceived information is reduced by System 1 to any simplified model (using heuristics), which will already be considered by System 2, for which the final decision remains.

As indicated in Picture 1, System 2 is slow; it cannot process too many information pulses at once. This leads to the fact that when it is overloaded, some processes that it must process will go through System 1. It turns out that System 1 is primarily aimed at simplifying the life of a person, making the functioning of his cognitive processes more efficient.

The outgoing impulse (decision) can be controlled to some extent by a person, even causing some internal struggle in him. Each person is familiar with a state in which he cannot determine whether to follow his intuition or his common sense. This banal contradiction can be considered from a new angle in the framework of the proposed theory. An intuitive solution is not necessarily completely instinctive. It can be based on effective heuristic, which could take into account more important information than rational System 2, and, as a result, be better.

One of the problems associated with solutions that passed only through System 1 is that they can consider current “hedonistic” motives — that is, be aimed at pleasure. There is nothing wrong with this, if it does not harm a person. But the following often happens: this concerns the problems of overeating, smoking, and other bad habits.

An important part of the system is that it responds to a pulse containing time information in different ways. So, if the information relates to current processes and the immediate prospects, decision-making can be greatly affected by System 1: it will most likely be more impulsive, quick and instinctive.

This process is explained quite simply. Biologically rooted System 1 was supposed to, among other things, protect the “master” if he was in danger, and there is little time for reasoning in such situations: solutions should be taken quickly, because it is a matter of survival of the individual. This process, as some psychologists believe, underlies hyperbolic discounting. Psychology does not stand still, and its fruitful cooperation with economic theory will continue and has prospects. The model proposed by Kahneman is of great importance for both sciences, and for PE. It allows one to “penetrate” the process of human thinking, makes accessible an understanding of complex schemes that previously could only be observed in experiments, described, but not see their causes.

The two-system approach, like all behavioral theories, does not try to destroy old models, but only supplements them, making them more understandable and effective. The neoclassical model of an economic person included only System 2, which, as was shown above, exists only as part of the general cognitive system of a person in close cooperation with System 1, without which it cannot function.

Through the prism of a two-system approach, anomalies and deviations from the normative rational model of behavior no longer seem meaningless. A deep biological and evolutionary logic is visible in them: they are an integral part of human consciousness, and as a result, accompany it in any activity, including economic.

Kahneman’s model was also able to show the nature of the functioning of certain cognitive distortions, for example, hyperbolic discounting. This understanding of the essence of the process not only allows a deeper study of its effect on human life but perhaps also offer solutions to problems that may be caused by it.

The reduced idea of a person as a rational agent makes it impossible to understand the complex systemic connections that exist between the decision-making process, cognitive distortions, heuristics, results of economic activity, etc.

In my opinion, the Kahneman system does not consider one major factor in its model: the category of will, which plays a huge role, for example, in the case of overcoming a destructive instinctive impulse.

### **3.6 Behavioral economics in nowadays**

Despite a lot of success, behavioral economics science is still at the beginning of its journey. However, this field is increasingly sought for its significant interconnection with the practice. Regarding this, there are many explanations in the finance field. And it offers much more accurate predictions than classical economic theory.

In the Czech Republic, the topic of behavioral economics is not as widespread as in USA. Nevertheless, there are many publications in the country, and some are even written by Czech authors. There are still few of them, but in my opinion, this is mainly because Czech students, who study economics have a very small experience of facing with the practice in behavioral economics.

From my little personal survey, I even found out that nobody of my friends and classmates did not hear about behavioral economics, and they roughly knew what this theory about or at least the meaning of this definition. Most of the theses related to this topic come from the University of Economics in Prague (VŠE) and rarely do it at Masaryk University in Brno. That's because the definition of behavioral economics is not fully understandable in other universities, in Czech Republic. As many other authors who deal with this topic, it is necessary to know that it is a very demanding discipline and it is crucial to have a good understanding and enough knowledges of the psychology science. Behavioral economics is also based on the implementation of various experiments and describing the functioning of economics in practice. In my opinion, the Czech education system more built on teaching the theory, so this field is not too much compatible with it. Of course, there are a handful of people in our country who have failed and engaged in behavioral economics eats very intensely. Most of them, however, did not reach her in our country. Mostly at first the idea of this science came across foreign studies.



According to my personal survey, the University of Economics in Prague has probably the largest “base” of behavioral economics in the Czech Republic. It also includes the Laboratory of Experimental Economics (LEE), which was found in August 2009. In the laboratory they are engaged in research and experiments in the field of experimental economics, but also behavioral economics. Under her auspices, several student researches and theses were carried out.

## **4 Practical Part**

This part of the thesis is devoted to the description of own research, performed on a sample of consumers of beauty services. The aim of the research is to verify the selected behavioral biases and their impact on human behavior.

### **4.1 Setting the assumptions of the research and creating a questionnaire**

The determination of preconditions for own research is based on the starting points described by Dan Ariely (2008) – they relate to:

- “Bait” to support the sale of a specific product,
- “Anchor” price,
- irrational behavior when something is “FREE”.

The research also examines assumptions about changes in consumer behavior due to the COVID pandemic.

#### **4.1.1 “Bait” to support the sale of a specific product**

First assumption: When comparing and choosing alternatives, people not only compare options, but also compare those options that are easily comparable. For example, if they have three trips to choose from: to Paris (with free breakfast), to Rome (with free breakfast) and to Rome (without breakfast included), most people would probably choose Rome with free breakfast. The reason is that it is easier to compare these two options for Rome than to compare Paris and Rome (Ariely, 2008).

This assumption can be used in practice – to add a special “bait” to the range of products and prices, which will be the opposite option for the product that the company really wants to sell.

Following this assumption, the questionnaire will include the following question:

**Q: You have a choice of three types of services, which variant would you probably choose?**

- a) Manicure with nail polish OPI + nourishing care
- b) Manicure with nail polish LUXIO + nourishing care
- c) Manicure with nail polish LUXIO

According to Ariely's test (Ariely, 2008), the vast majority of respondents should have chosen option b). If this assumption is confirmed, it will be possible to claim that this sales model is suitable to support the sale of the selected service – (“nail polish LUXIO” is this selected item in the question above).

#### **4.1.2 “Anchor” price**

The second assumption is that people attribute a certain value to a product on the basis of the so-called “anchor” price – a price they had experienced before. For example, the anchor price of a particular object, say a TV, will affect the way people perceive the value of all TVs from now on (Ariely, 2008). Other prices will seem low or high compared to the original anchor price. In other words, decisions on future purchases of TVs will become coherent once the starting price is set for the consumer.

The own research will examine how previous experience with the use of services and prices affects the current behavior of customers. First, they will be asked the question, which beauty services and how often they use.

Different types of beauty services are used with different periodicity: eg manicure is usually done once every 3-4 weeks, the frequency of facial skincare treatments can be determined by the beautician or depending on the type of treatment used (some peelings are done every week during 1-1,5 months, general skin care – once every 4-6 weeks, injections – once every six months or otherwise as recommended by a specialist). It is obvious that it is very difficult to compare the frequency of using beauty services using the simple commonly used scale (eg daily / once a week / monthly / once a year etc.). Therefore the following evaluation scale of answers was chosen within the survey: never / unsystematically / systematically.

Systematically means that women use the service regularly at relatively the same intervals (eg every 5 weeks, once every 3 months, etc.). Unsystematically, the consumption of the service means that a woman, for example, visits the salon twice in two consecutive months, then has a break of six months, then starts going to the salon again (eg three visits), then has a break again, for example a year. The exact scale cannot be determined here because, as already mentioned, the frequency of consumption of services is very diverse.

This scale “never / unsystematically / systematically” will make it possible to assess the consumption of services more objectively. The first question is formulated as following:

**Q: Which beauty services do you use? How often? (mark with a cross: never/ unsystematically / systematically):**

- a) Manicure (never/ unsystematically / systematically)
- b) Pedicure (never/ unsystematically / systematically)
- c) Hairdresser’s (never/ unsystematically / systematically)
- d) Facial skincare treatments (never/ unsystematically / systematically)
- e) Eyelash treatment (never/ unsystematically / systematically)
- f) Eyebrow shaping (never/ unsystematically / systematically)
- g) Massages (never/ unsystematically / systematically)

Respondents then indicate the price they usually spend on these services:

**Q: What amount do you usually spend for one treatment within the provision of these services (in CZK). If you do not use the service, leave the box blank.**

- a) Manicure: ..... CZK
- b) Pedicure: ..... CZK
- c) Hairdresser’s: ..... CZK
- d) Facial skincare treatments: ..... CZK
- e) Eyelash treatment: ..... CZK
- f) Eyebrow shaping: ..... CZK
- g) Massages: ..... CZK

In addition, respondents will be asked to indicate the price they are willing to spend for the services (maximum) if they are convinced that they will receive a certain advantage together with this service. For example:

**Q: Please indicate how much you are willing to spend for 1 given service (maximum) if you are convinced of the very high quality and professionalism of the service provider (manicurists / hairdressers / beauticians...):**

- a) Manicure: max. .... CZK
- b) Pedicure: max. .... CZK
- c) Hairdresser's: max. .... CZK
- d) Facial skincare treatments: max. .... CZK
- e) Eyelash treatment: max. .... CZK
- f) Eyebrow shaping: max. .... CZK
- g) Massages: max. .... CZK

In the same way, respondents will indicate the maximum allowable price for the services if:

- Services are highly recommended by a friend
- They are highly recommended by a famous person (eg a positive mention of an actress you like on a social network)
- They are provided in a new salon, which does not yet have many reviews and ratings, but the salon looks very nice and is close to your home
- They have a limited time discount of 15%
- They have a limited time discount of 30%

The results will need to be compared with the “anchor” price given by the respondents at the beginning (with which they have experience). The conclusion will be how much the “anchor price” has on the future perception of prices.

The results can be used in the pricing of a beauty salon. Over time, it is quite difficult for salons to raise prices – it is not pleasant for existing customers, but it is necessary due to inflation. The question is, how to increase prices so that existing customers do not perceive it negatively, and vice versa to get a benefit? Based on the results, it will be

determined to what % it is appropriate to increase prices (how much is acceptable for respondents). In addition, it is possible to provide something extra – those benefits that justify an increase in price.

#### **4.1.3 Irrational behavior when something is “FREE”**

It is an assumption, that when something is “FREE” or contains the words “Zero”, “0 CZK” – It is very attractive to people, even if the offer is of no value to them (Ariely, 2008).

As part of the own research, it will be found out how beauty salon customers react to offers containing something “free” or “zero”.

**Q: Please rate how attractive the following offer is for you. Use the scale from 1 to 10 (1 – “not entirely attractive”, 10 – “very attractive”)**

- a) “Manicure + pedicure services for only 1199 CZK”
- b) “Manicure + pedicure services for 1199 CZK. Free wine / cocktail!”
- c) “Manicure services for 700 CZK + pedicure for only 499 CZK!”

Next, it will be examined in more detail how rationally the respondents are able to behave. They will be provided with 3 essentially the same special offers, only their wording differs. For the salon, the provision of all 3 options is equivalent: it receives the same sales:

**Q: Imagine that you spend 1000 CZK for one visit to the salon. Evaluate how attractive the following offer of this salon is for you? Use the scale from 1 to 10 (1 – “not entirely attractive”, 10 – “very attractive”)**

- a) Discount card for 5 salon visits: 5% discount on each subsequent visit
- b) You have a 50% discount for every 5th visit
- c) You have a discount of CZK 500 for every 5th visit

The table 1 calculates what sales the salon receives in the case of providing these three variants of discounts.

**Table 1: Sales of the beauty salon in case of providing selected discount systems**

	a) Discount card for 5 salon visits: 5% discount on each subsequent visit	b) 50% discount for every 5th visit	c) Discount of CZK 500 for every 5th visit
1 <sup>st</sup> visit	1000 CZK	1000 CZK	1000 CZK
2 <sup>nd</sup> visit	950 CZK	1000 CZK	1000 CZK
3 <sup>rd</sup> visit	903 CZK	1000 CZK	1000 CZK
4 <sup>th</sup> visit	857 CZK	1000 CZK	1000 CZK
5 <sup>th</sup> visit	815 CZK	500 CZK	500 CZK
<b>Total salon sales</b>	<b>4524 CZK</b>	<b>4500 CZK</b>	<b>4500 CZK</b>

Source: author, 2020

#### **4.1.4 Impacts of the COVID on the consumer behavior**

The last assumption concerns the current situation – the effects of the coronavirus pandemic on consumer behavior in the examined sector (beauty services).

At the time of the application of restrictive measures related to COVID, household consumption probably decreased. This is confirmed by some statistical surveys – for example, according to Ceska Sportelna Research (2020) during the quarantine in the spring (from 16 March to 12 April) there was a decrease in card transactions by more than a fifth compared to 2019. At the same time, before quarantine, they grew by about 7 % year-on-year. Total household consumption is falling by 10-15 %. For comparison, in 2009 household consumption fell by less than two percent in the worst quarter. In this research, it was found that people started to buy more food, at the beginning of quarantine and medicines, but other expenses decreased significantly (after deducting food expenses, other expenses decreased by as much as 35 %).

The own research will focus on how quarantines (spring 2020 and autumn 2020) have affected spending on beauty services. The expected consumption margin may be justified by the following factors:

- higher propensity to investigate (reduction in income due to job loss, illness or reduction in working hours during a pandemic),
- forced reduction of consumption (due to the mandatory suspension of body care services – so the closure of all beauty salons),
- voluntary reduction of consumption (in order to support the “stay home” movement – not to spread the disease and reduce contacts with other people, including beauty service providers).

In the research, respondents will be asked questions to determine whether there has been a reduction in the consumption of beauty services and the reasons for the reduction in consumption.

**Q: Have you reduced your consumption of beauty services due to the COVID epidemic this year? Use the scale from 1 to 10:**

1 – “I consume services to the same extent as before the epidemic”

10 – “I significantly reduced consumption”

**Q: The reduction in the consumption of beauty services due to the COVID epidemic was in your case caused by... Use the scale from 1 to 10:**

1 – “voluntary reduction of consumption ("stay home")

10 – “forced reduction of consumption (due to the closure of beauty salons)”

**Q: The reduction in the consumption of beauty services due to the COVID epidemic was in your case caused by.... Use the scale from 1 to 10:**

1 – forced reduction of consumption (due to the closure of beauty salons)

10 – the need to save money, falling incomes

Based on the above assumptions and defined questions, a questionnaire form is created (see Appendix A).



## 4.2 Description of the data collection method and the sample

The pilot version was conducted 1.11.2020. 5 respondents filled in the questionnaire form and provided feedback. Minor adjustments concerning the wording of the questions have been made.

The final questionnaire form was created used Google Forms and online portal VypInto. The questionnaires were also printed on paper. The link from Google Forms to fill in the questionnaire was send to the available contacts with a request to spread the link further. Questionnaire form on the VypInto was filled in by the visitors of this portal.

Data collection took place in the period 4.11.-12.11.2020. The total number of respondents, that took part in the questioning, was 87 persons (see table 2).

**Table 2: Number of respondents**

<b>Questionnaire form</b>	<b>n</b>	<b>%</b>
Google Forms	30	34%
VypInto	17	20%
Paper forms	40	46%
<b>Total</b>	<b>87</b>	<b>100%</b>

Source: author, 2020

The main characteristics of the sample are:

- women,
- consumers of beauty services,
- permanently live in Prague.

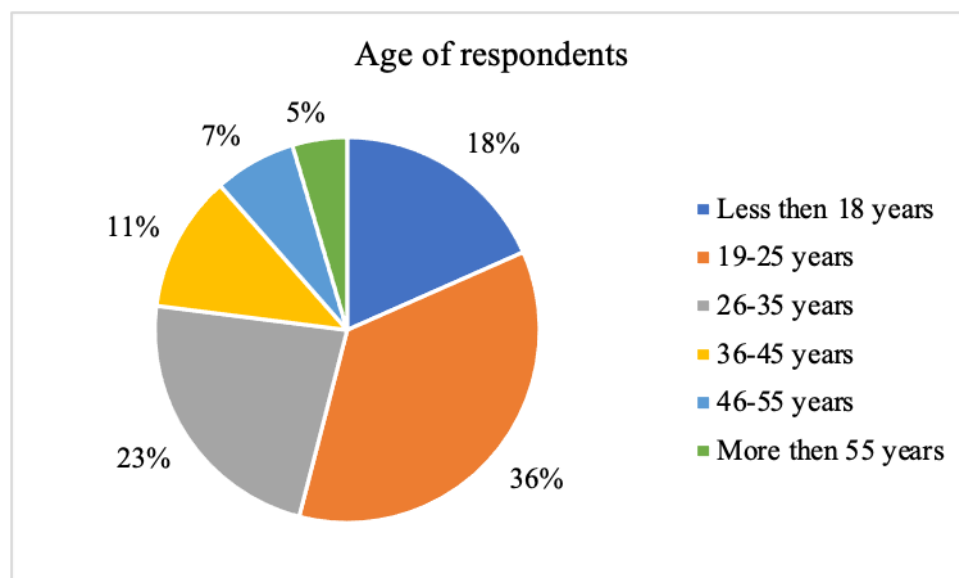
The structure of respondents by age is shown in table 3, see also figure 4. The majority of respondents are young women: 36% of the all respondents are 19-25 years old, 23% - 26-35 years old.

**Table 3: Age of respondents**

Age	n	%
Less than 18 years	16	18%
19-25 years	31	36%
26-35 years	20	23%
36-45 years	10	11%
46-55 years	6	7%
More than 55 years	4	5%
<b>Total</b>	<b>87</b>	<b>100%</b>

Source: author, 2020

**Figure 4: Age of respondents**



Source: author, 2020

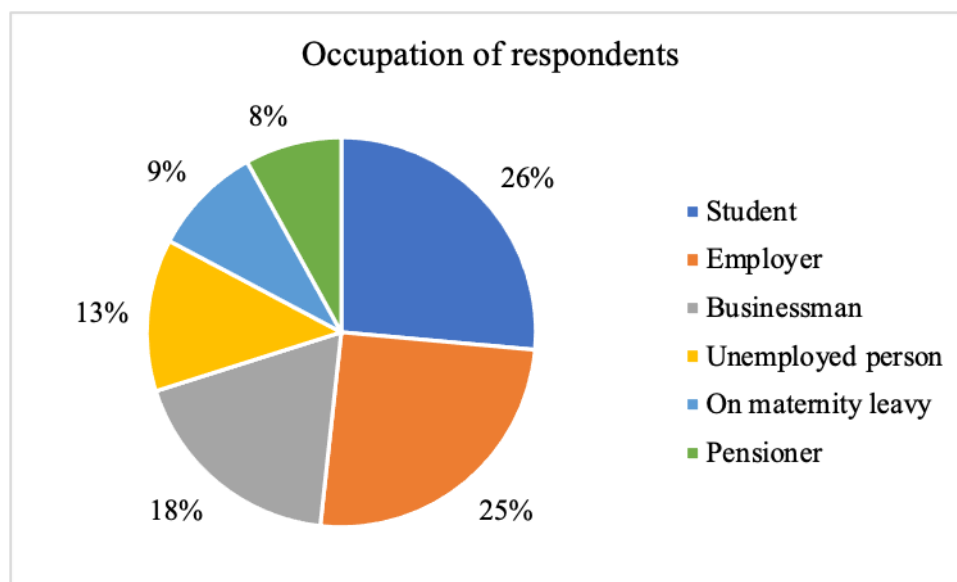
The structure of respondents by occupation is shown in table 4. The shares of individual groups are illustrated by the figure 5. Approximately a quarter of respondents are students (26%), another quarter – employees (25%). Unemployed, persons on maternity leave and pensioners are minor groups, which on average corresponds to the structure of the female population in the Czech Republic.

**Table 4: Occupation of respondents**

Occupation	n	%
Student	23	26%
Employer	22	25%
Businessman	16	18%
Unemployed person	11	13%
On maternity leavy	8	9%
Pensioner	7	8%
<b>Total</b>	<b>87</b>	<b>100%</b>

Source: author, 2020

**Figure 5: Occupation of respondents**



Source: author, 2020

The structure of the sample according to the average monthly income is diverse: on average, it is income in the amount of 25.000 to 45.000 CZK. According to CZSO (2020) data, the average gross monthly wage of employees in Prague was CZK 42.553 in 2019. After tax deduction, the average level of net income of the population of Prague corresponds to the average level of income of the respondents in the sample.

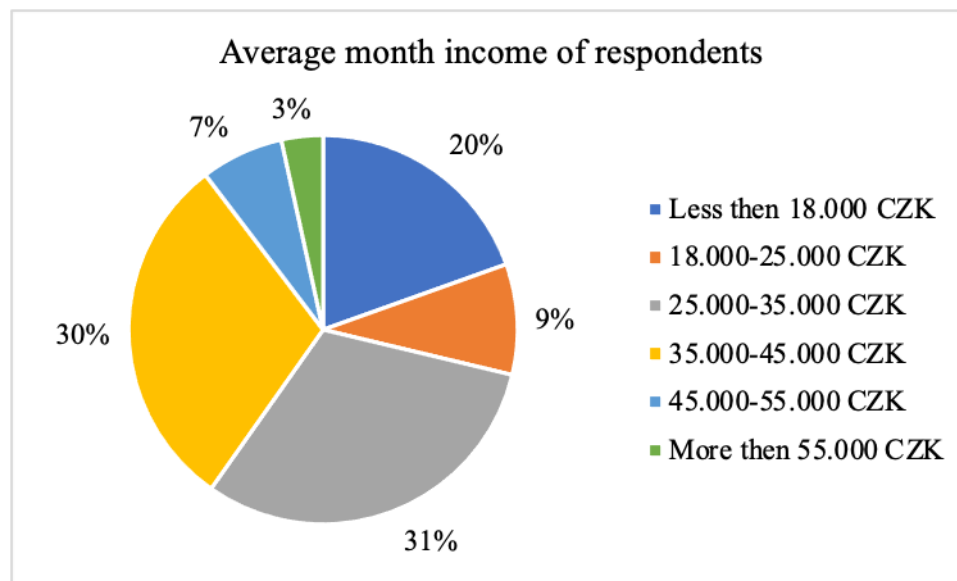
A fifth of the respondents are women with incomes below 18.000 CZK (they are mainly student or unemployed). An overview of respondents' answers about their average incomes is given in table 5. The structure is illustrated by figure 6.

**Table 5: Average month income of respondents**

Average month income	n	%
Less then 18.000 CZK	17	20%
18.000-25.000 CZK	8	9%
25.000-35.000 CZK	27	31%
35.000-45.000 CZK	26	30%
45.000-55.000 CZK	6	7%
More then 55.000 CZK	3	3%
<b>Total</b>	<b>87</b>	<b>100%</b>

Source: author, 2020

**Figure 6: Average month income of respondents**



Source: author, 2020

Furthermore, athen analysis of the respondents' answers to the main questions is performed.

### 4.3 Analysis of the questionnaire survey results

The answers to the first question concern the general consumption of different types of beauty services. During the survey, respondents stated how often they use the 7 beauty services:

- manicure,
- pedicure,
- hairdresser's,
- facial skincare treatments,
- eyelash treatment,
- eyebrow shaping,
- massages.

Results are given in the table 6.

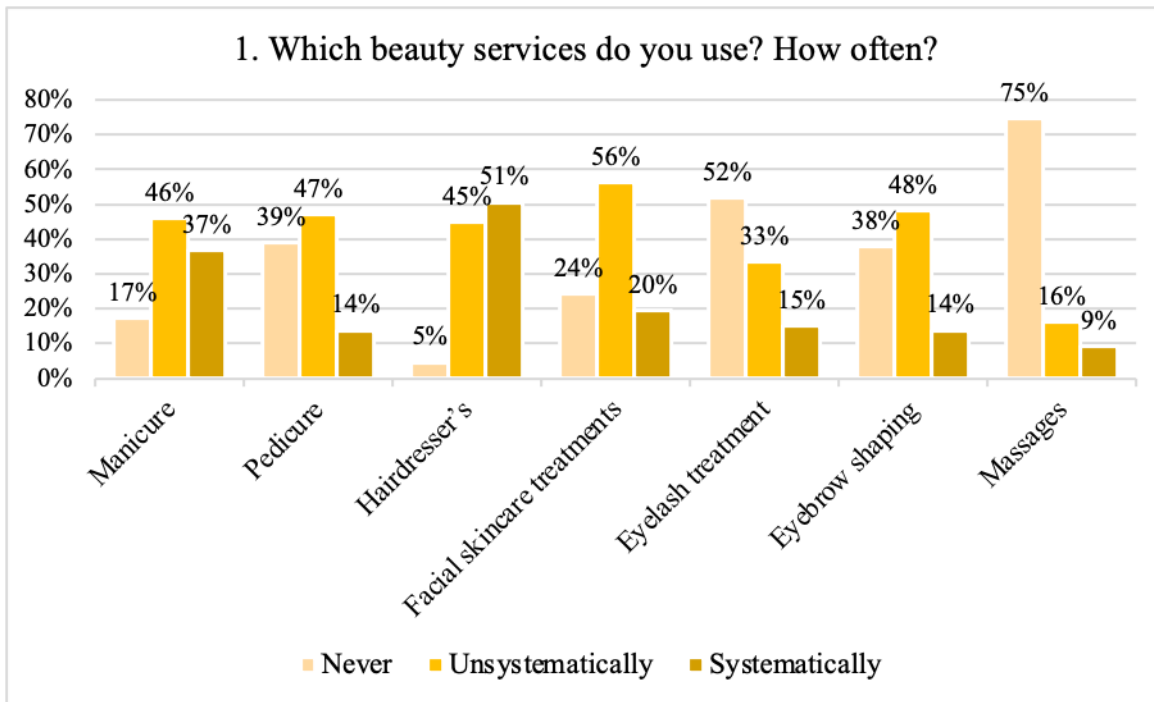
**Table 6: Services that respondents use and frequency of their using**

Services	Never		Unsystematically		Systematically	
	n	%	n	%	n	%
Manicure	15	17%	40	46%	32	37%
Pedicure	34	39%	41	47%	12	14%
Hairdresser's	4	5%	39	45%	44	51%
Facial skincare treatments	21	24%	49	56%	17	20%
Eyelash treatment	45	52%	29	33%	13	15%
Eyebrow shaping	33	38%	42	48%	12	14%
Massages	65	75%	14	16%	8	9%

Source: author, 2020

Almost all respondents (95%) stated that they use the hairdressing service, more than half of them use it systematically. Another most popular service is manicure: it is used by 83% of respondents (37% - systematically). Pedicure is less used than manicure: 39% of respondents never use it and almost half use it only unsystematically (47%). A fairly popular service for respondents is facial skincare treatment – it is used by three quarters of respondents (76%), but mostly unsystematically (56%). Eyelash treatment and massages are among the least used services. Results are illustrated by the figure 7.

**Figure 7: Services that respondents use and frequency of their using**



Source: author, 2020

Then the respondents had to state what average amount they usually spend on individual services (for one procedure). They indicated their answer with a number – in Czech crowns (CZK). The obtained answers were then divided into 6 groups: up to 250 CZK, from 250 to 500 CZK, from 500 to 750 CZK, etc. (see Table 7). If the respondents did not use the service – they did not fill in the answers about the prices of services. Some respondents did not provide answers to this question, although they stated in the previous question that they used the service. It is clear that the most answers were obtained for the price of the services that are used the most – hairdressing services, manicure and facial skincare treatment.

Based on the answers obtained, averages were calculated (last column of Table 7). Most respondents spend on facial skincare treatments (average 1400 CZK) and hairdressing services (800 CZK). Approximately the same amounts are spent by respondents on manicure, pedicure, eyelash treatments and massages (all for 550 CZK, manicure a little more expensive – 590 CZK).

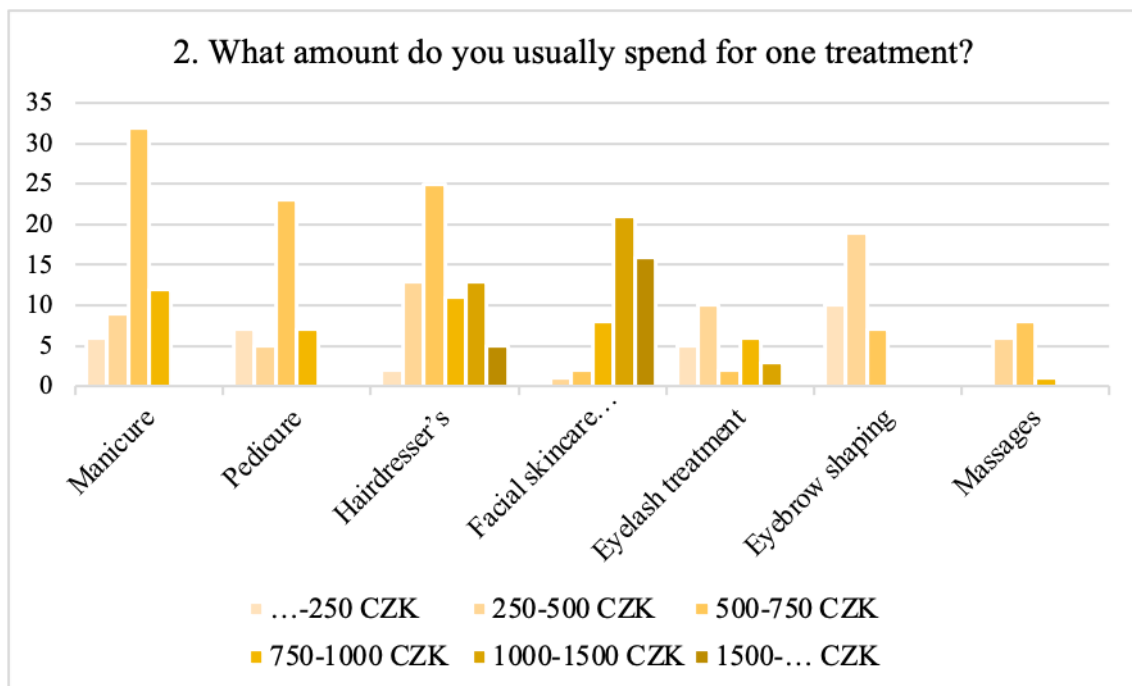
**Table 7: Amount, respondents usually spend for one beauty treatment (“anchor” price)**

	<i>n</i>	...- 250 CZK	250- 500 CZK	500- 750 CZK	750- 1000 CZK	1000- 1500 CZK	1500-... CZK	Average, CZK
Manicure		6	9	32	12	0	0	590 CZK
Pedicure		7	5	23	7	0	0	550 CZK
Hairdresser’s		2	13	25	11	13	5	800 CZK
Facial skincare treatments		0	1	2	8	21	16	1400 CZK
Eyelash treatment		5	10	2	6	3		550 CZK
Eyebrow shaping		10	19	7	0	0	0	350 CZK
Massages		0	6	8	1	0	0	550 CZK

Source: author, 2020

The structure of the answers is illustrated in figure 8. It is also possible to compare the number of responses given for the evaluation of each service (least answers for less used services – eyelash treatments, eyebrow shaping, massages).

**Figure 8: Amount, respondents usually spend for one beauty treatment**



Source: author, 2020

The respondents' answers on the topic of frequency of use and average prices of beauty services are further used to verify the research assumptions.

#### **4.3.1 Acceptable level of service price and comparison with the „anchor“ price**

In the survey, respondents were asked to indicate the maximum price they are willing to pay for individual beauty services if the perceived benefits of these services change: for example, the service will be clearly recommended by a known person or the belief will be obtained about a very high level of service provider qualification.

The maximum prices mentioned by the respondents were divided into groups which have already been used in this research: eg less than 250 CZK, 250-500 CZK, etc. These maximum acceptable prices are then compared with the usual („anchor“) price that respondents spend on services. The change between the maximum and the anchor price is calculated as a percentage. The results are given for each service separately, and then a general summary is given.

##### **Manicure**

For the previous question, it was found that the average („anchor“) price that respondents spend on manicures is 590 CZK.

It was found that if the respondents are convinced of the very high quality of service and professionalism of the manicurist, they can accept prices up to 730 CZK on average – this is a change by almost a quarter (+ 23,7%) compared to the „anchor“ price.

The second factor that can significantly affect the amount of an acceptable manicure price is the recommendation of friends (the price can be higher by +15,3%, ie up to 680 CZK). Interestingly, recommending a manicure by a familiar person can provoke the opposite reaction: few respondents admitted that they accepted slightly higher prices, some stated that they did not trust familiar people at all and therefore it could reduce the level of accepted price.

The fact that the service recommendations are important for respondents is confirmed by the fact that the level of acceptable manicure prices decreases if the salon is new and has no reviews and ratings. The questionnaire described to the respondents a model situation in which they would gain certain benefits – the salon is new and located close to their home. The absence of recommendations and reviews, even from unknown people (eg on the Internet) increases the caution of customers when deciding on the price



of the service in this salon. Many respondents stated that they would accept a lower than usual („anchor“) price for a manicure in this model of the situation. The average level of acceptable prices in this case is 570 CZK, which is 3,4% less than the usual „anchor“ price.

The presence of discounts can affect the acceptable price level, but not significantly: +5.1% in the case of a 15% discount (to the level of 620 CZK), +5,9% in the case of a 30% discount (to the level of 625 CZK). Results of the comparison are listed in the table 8.

**Table 8: Maximal amount, respondents are willing to spend for manicure**

	...- 250 CZK	250- 500 CZK	500- 750 CZK	750- 1000 CZK	1000- 1500 CZK	1500-... CZK	Average, CZK	Change: max. to „anchor“ price
<b>Usual ("anchor") price</b>	<b>6</b>	<b>9</b>	<b>32</b>	<b>12</b>	<b>0</b>	<b>0</b>	<b>590 CZK</b>	
<b>Max. acceptable price (average) if...</b>	4	8	28	13	3	0	640 CZK	+8,5%
very high quality, professionalism	2	6	30	15	8	0	<b>730 CZK</b>	<b>+23,7%</b>
highly recommended by a friend	4	7	27	13	6	0	<b>680 CZK</b>	<b>+15,3%</b>
highly recommended by a famous person	4	10	17	7	3	0	600 CZK	+1,7%
new nice salon near the home, but doesn't have many reviews and ratings	5	10	27	10	0	0	<b>570 CZK</b>	<b>-3,4%</b>
limited time discount of 15%	5	6	35	14	0	0	620 CZK	+5,1%
limited time discount of 30%	4	8	32	16	0	0	625 CZK	+5,9%

Source: author, 2020

## Pedicure

According to the procedure described above, the “anchor” price of pedicure, which respondents are used to pay (550 CZK per procedure), was also compared with the maximum level of acceptable price for pedicure under certain conditions. The results obtained in the comparison of pedicure prices do not differ much from the results obtained in manicures. The belief in the high quality and professionalism of the pedicurist is the most important factor that can increase the level of acceptable price (up to 650 CZK, +18,2% compared to the “anchor” price).

The recommendation of friends is the second important factor – the maximum accepted price of a pedicure in this case is 630 CZK (+14,5%).

In the case of pedicure, respondents spend more than for manicure if the service is recommended by a known person (+9,1%, in the case of manicure it was +1,7%). However, the number of responses when evaluating the price of a pedicure is lower than when evaluating a manicure, so the results are less reliable here.

The factor of the discount is significant for pedicure, but only a few: the acceptable price of the pedicure increases to a maximum of 580-590 CZK (ie +5.5% or +7.3%). The results of the comparison of the “anchor” and the maximum acceptable price of the pedicure are shown in Table 9.

**Table 9: Maximal amount, respondents are willing to spend for pedicure**

	...- 250 CZK	250- 500 CZK	500- 750 CZK	750- 1000 CZK	1000- 1500 CZK	1500-... CZK	Average, CZK	Change: max. to „anchor“ price
<b>Usual ("anchor") price</b>	<b>7</b>	<b>5</b>	<b>23</b>	<b>7</b>	<b>0</b>	<b>0</b>	<b>550</b>	
<b>Max. acceptable price (average) if...</b>	4	6	22	8	1	0	600	+9,1%
very high quality, professionalism	1	4	27	10	0	0	<b>650</b>	<b>+18,2%</b>
highly recommended by a friend	4	5	22	9	2	0	<b>630</b>	<b>+14,5%</b>
highly recommended by a famous person	5	4	20	7	1	0	600	+9,1%
new nice salon near the home, but doesn't have many reviews and ratings	7	6	21	5	0	0	<b>530</b>	<b>-3,6%</b>
limited time discount of 15%	5	6	20	10	0	0	590	+7,3%
limited time discount of 30%	4	9	19	9	0	0	580	+5,5%

Source: author, 2020

### **Hairdresser's**

When comparing the “anchor” price of hairdressing services (800 CZK per procedure) and the maximum acceptable price (see table 10), it was found that any of the selected factors can provoke the willingness of respondents to pay for the service more, respectively to accept a higher price.

The most important factor is the high quality and professionalism of the hairdresser – In comparison with the services described above (manicure, pedicure), this factor is much more important. If the respondents are convinced of the high quality of hairdressing

services and the professionalism of the hairdresser, they accept a price of up to 1060 CZK, which is 32,5% more than the “anchor” price to which they are used.

The factor of recommending friends is less important for hairdressing services than for manicures and pedicures – the maximum acceptable price increases by about 10% to 880 CZK.

Respondents are more willing to visit a new salon near their home that has no reviews and ratings for the purpose of using hairdressing services more than for manicure and pedicure services. This is an interesting finding, which means that respondents are more prone to risk – using the services of an unknown hairdresser than when using the services of a manicure or pedicure. However, high professionalism was a priority for hairdressers, so it can be assumed that the lower interest in visiting an unknown manicure / pedicure salon caused possible concerns about cleanliness and hygiene. The average accepted price of hairdressing services in the new salon is 860 CZK (+7,5% compared to the “anchor” price).

The 15% discount has almost no effect on the change in the acceptable price of hairdressing services (810 CZK, +1,3%). A 30% discount can already cause a slightly greater tendency to increase the level of affordable price up to 850 CZK (+6,3%).

**Table 10: Maximal amount, respondents are willing to spend for hairdresser’s**

	...- 250 CZK	250- 500 CZK	500- 750 CZK	750- 1000 CZK	1000- 1500 CZK	1500-... CZK	Average, CZK	Change: max. to „anchor“ price
<b>Usual ("anchor") price</b>	<b>2</b>	<b>13</b>	<b>25</b>	<b>11</b>	<b>13</b>	<b>5</b>	<b>800</b>	
<b>Max. acceptable price (average) if...</b>	2	10	20	15	15	6	<b>890</b>	+11,3%
very high quality, professionalism	0	4	15	20	22	9	<b>1060</b>	<b>+32,5%</b>
highly recommended by a friend	1	10	24	12	15	6	880	+10,0%
highly recommended by a famous person	3	10	20	12	14	5	850	+6,3%
new nice salon near the home, but doesn't have many reviews and ratings	2	12	21	10	14	6	860	+7,5%
limited time discount of 15%	2	11	22	16	13	3	<b>810</b>	<b>+1,3%</b>
limited time discount of 30%	1	14	19	17	14	5	850	+6,3%

Source: author, 2020

## **Facial skincare treatments**

Another researched area of beauty services is facial skincare treatment. The “anchor” price for these services is on average 1400 CZK per one treatment. Respondents of this type of service are less sensitive to changes in the situation and the offer of additional benefits.

They are willing to accept a maximum of 14,3% higher prices for facial skincare treatments, if they are convinced of the high quality and professionalism of the provider.

A comparison of the maximum acceptable price and the “anchor” price under the influence of recommendation factors (friends and celebrities) shows that respondents are not willing to significantly increase the level of acceptable price. The level of acceptable prices hardly changes compared to the “anchor” price (+2,5% when services are recommended by a friend, +1,4% - by a famous person).

The results also show that respondents are particularly careful when trying the services of a new salon that has no reviews: they stated that they are willing to pay significantly less for services, ie “to try” providers on a cheaper service at the beginning. In the new salon, the level of reasonable price is reduced to 1080 CZK (-22,9% from the “anchor” price).

It is interesting that when offering a 15% discount, the level of acceptable price decreases by 5,7%. This may be due to the poor quality of respondents' answers. In the case of providing a 30% discount, respondents accept 3,6% higher prices.

The results in relation to the prices of cosmetic services are shown in table 11.

**Table 11: Maximal amount, respondents are willing to spend for facial skincare treatments**

	...- 250 CZK	250- 500 CZK	500- 750 CZK	750- 1000 CZK	1000- 1500 CZK	1500-... CZK	Average, CZK	Change: max. to „anchor“ price
<b>Usual ("anchor") price</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>8</b>	<b>21</b>	<b>16</b>	<b>1400 CZK</b>	
<b>Max. acceptable price (average) if...</b>	0	1	3	9	18	17	1384 CZK	-1,1%
very high quality, professionalism	0	0	1	6	15	26	<b>1600 CZK</b>	<b>+14,3%</b>
highly recommended by a friend	0	0	2	7	22	17	1435 CZK	+2,5%
highly recommended by a famous person	0	0	2	7	23	16	1420 CZK	+1,4%
new nice salon near the home, but doesn't have many reviews and ratings	2	2	8	16	11	9	<b>1080 CZK</b>	<b>-22,9%</b>
limited time discount of 15%	0	1	3	10	18	13	1320 CZK	-5,7%
limited time discount of 30%	0	0	2	10	17	19	1450 CZK	+3,6%

Source: author, 2020

### **Eyelash treatment**

“Anchor” price of the eyelash treatments is 550 CZK. This price can be increased by a maximum of 18,2% to 650 CZK, if the respondents are convinced of the high quality and professionalism of the providers of these services. New salons providing this type of service are less attractive to respondents (they accept average price of 510 CZK). The recommendations of celebrities and celebrities are relatively less significant in terms of the ability to increase acceptable prices. Detailed results are shown in Table 12.

**Table 12: Maximal amount, respondents are willing to spend for eyelash treatment**

	...- 250 CZK	250- 500 CZK	500- 750 CZK	750- 1000 CZK	1000- 1500 CZK	1500-... CZK	Average, CZK	Change: max. to „anchor“ price
<b>Usual ("anchor") price</b>	<b>5</b>	<b>10</b>	<b>2</b>	<b>6</b>	<b>3</b>	<b>0</b>	<b>550 CZK</b>	
<b>Max. acceptable price (average) if...</b>	5	8	4	6	3	0	600 CZK	+9,1%
very high quality, professionalism	2	8	6	7	3	0	<b>650 CZK</b>	<b>+18,2%</b>
highly recommended by a friend	5	8	3	6	4	0	600 CZK	+9,1%
highly recommended by a famous person	5	9	3	6	3	0	570 CZK	+3,6%
new nice salon near the home, but doesn't have many reviews and ratings	9	5	5	4	3	0	<b>510 CZK</b>	<b>-7,3%</b>
limited time discount of 15%	4	10	3	6	3	0	580 CZK	+5,5%
limited time discount of 30%	2	8	5	7	4	0	<b>670 CZK</b>	<b>+21,8%</b>

Source: author, 2020

### **Eyebrow shaping**

It was found that the offer of some benefits increases the demand for the service of eyebrow shaping in general: for example, a total of 36 respondents answered the question about the “anchor” price, but under conditions of high quality and professionalism of the service the number of respondents who stated an acceptable price increased (total of 40 respondents stated that they would consume the service at different prices).

The acceptable price of eyebrow shaping services can be increased by up to a quarter (+25,7%) to the level of 440 CZK, if celebrities are recommended.

New salons without reviews are less attractive to respondents: they are not willing to pay more than they are used to in these salons.

Overall, the usual and acceptable level of massage prices is quite low. Results are shown in the table 13.

**Table 13: Maximal amount, respondents are willing to spend for eyebrow shaping**

	...- 250 CZK	250- 500 CZK	500- 750 CZK	750- 1000 CZK	1000- 1500 CZK	1500-... CZK	Average, CZK	Change: max. to „anchor“ price
<b>Usual ("anchor") price</b>	<b>10</b>	<b>19</b>	<b>7</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>350 CZK</b>	
<b>Max. acceptable price (average) if...</b>	11	13	11	1	0	0	392 CZK	+11,9%
very high quality, professionalism	11	19	9	0	1	0	380 CZK	+8,6%
highly recommended by a friend	10	17	6	0	1	0	370 CZK	+5,7%
highly recommended by a famous person	8	12	15	1	0	0	<b>440 CZK</b>	<b>+25,7%</b>
new nice salon near the home, but doesn't have many reviews and ratings	11	20	5	0	0	0	<b>330 CZK</b>	<b>-5,7%</b>
limited time discount of 15%	12	6	14	1	0	0	400 CZK	+14,3%
limited time discount of 30%	12	5	16	2	0	0	<b>430 CZK</b>	<b>+22,9%</b>

Source: author, 2020

## Messages

The results show that various factors can significantly affect the level of acceptable massage prices. The offer of a 30% discount can have a particularly big effect, in this case the acceptable price of massages increases by 54,5% on average to 850 CZK.

Interestingly, the recommendation of celebrities plays an important role in massages – more important than other services. The acceptable price can therefore increase by almost a third (+27,3%) to 670 CZK.

The quality factor is less important for massages – the level of acceptable price can increase by 14,5% to 630 CZK. The results are shown in table 14.

However, the results of the evaluation of the price of massages are the least reliable of all services, because they were evaluated by a small number of respondents: “anchor” price was given by only 15 respondents, acceptable price of massages was stated by a maximum of 23 respondents (if massages are very high quality and professional).

**Table 14: Maximal amount, respondents are willing to spend for massages**

	...- 250 CZK	250- 500 CZK	500- 750 CZK	750- 1000 CZK	1000- 1500 CZK	1500-... CZK	Average, CZK	Change: max. to „anchor“ price
<b>Usual ("anchor") price</b>	<b>0</b>	<b>6</b>	<b>8</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>550 CZK</b>	
<b>Max. acceptable price (average) if...</b>	0	4	8	4	1	0	690 CZK	+25,5%
very high quality, professionalism	0	7	10	5	1	0	630 CZK	+14,5%
highly recommended by a friend	0	5	9	6	1	0	670 CZK	+21,8%
highly recommended by a famous person	0	4	8	7	1	0	700 CZK	+27,3%
new nice salon near the home, but doesn't have many reviews and ratings	0	4	7	2	0	0	590 CZK	+7,3%
limited time discount of 15%	0	3	7	2	2		700 CZK	+27,3%
limited time discount of 30%	0	2	5	3	2	1	850 CZK	+54,5%

Source: author, 2020

#### 4.3.2 Opinions on discounts and special offers of beauty services

Another question is focused on the so-called “bait” test. It is assumed that respondents choose a specific service (“bait”) that offers something extra from another service. A service of another type, even if it is very similar to “bait”, will not be preferred by respondents because it does not have a variant with which they can compare the benefits.

Respondents were offered three services to choose from, one of which is “bait”:

- Manicure with nail polish OPI + nourishing care
- Manicure with nail polish LUXIO + nourishing care (“bait”)
- Manicure with nail polish LUXIO

The results (see table 15) show that the “bait” service is preferred – It was chosen by 47% of respondents. The other services mentioned are preferred by a smaller number of respondents. It can be argued that the assumption of the “bait” option has been confirmed.



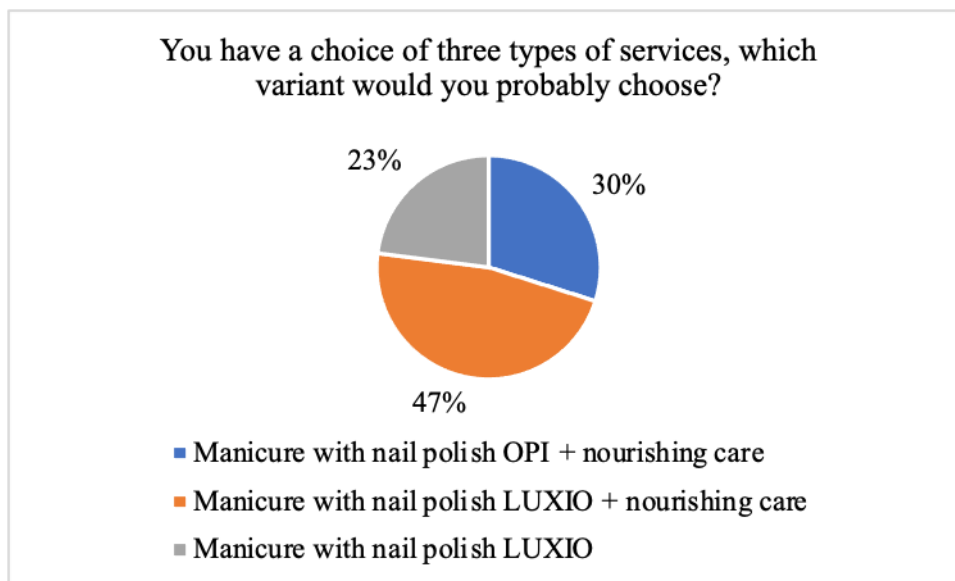
**Table 15: Service selection – „bait“ test**

You have a choice of three types of services, which variant would you probably choose?	n	%
Manicure with nail polish OPI + nourishing care	26	30%
Manicure with nail polish LUXIO + nourishing care	41	47%
Manicure with nail polish LUXIO	20	23%
<b>Total</b>	<b>87</b>	<b>100%</b>

Source: author, 2020

The results of the test are shown by the figure 9.

**Figure 9: Service selection – „bait“ test**



Source: author, 2020

Respondents were asked to rate how attractive the three service offerings are to them. They used a 10-point scale (1 – not attractive, 10 – very attractive). These were the following three offers:

- “Manicure + pedicure services for only 1199 CZK”
- “Manicure + pedicure services for 1199 CZK. Free wine / cocktail!”
- “Manicure services for 700 CZK + pedicure for only 499 CZK!”

The results of the evaluation are shown in the table 16. Approximately one third of the respondents stated that they were not at all attractive to them. Average ratings of attractiveness were given for the first type of offer (22% of respondents gave a rating of 5

points). The highest ratings were given for the second type of offer (21% chose a rating of 10 points).

The average score for each service is calculated and shown in the morning row of table 16. The results show that the second type of services is the most attractive (48%), the first and the third – approximately equally attractive (40% and 39,7%).

From the results it can be concluded that the established assumption has been confirmed: if the word “free” is mentioned in the recess, it attracts the customer the most. This is also confirmed by the “bait” assumption - the second offer is transferable from the first and contains something extra (“bait”).

**Table 16: Evaluation of how attractive the listed service offers are**

score	"Manicure + pedicure services for only 1199 CZK"		"Manicure + pedicure services for 1199 CZK. Free wine / cocktail!"		"Manicure services for 700 CZK + pedicure for only 499 CZK!"	
1	27	31%	24	28%	30	34%
2	9	10%	6	7%	10	11%
3	7	8%	6	7%	6	7%
4	5	6%	15	17%	7	8%
5	19	22%	3	3%	11	13%
6	2	2%	5	6%	2	2%
7	4	5%	2	2%	7	8%
8	3	3%	7	8%	2	2%
9	7	8%	1	1%	3	3%
10	4	5%	18	21%	9	10%
Total	348		418		345	
Average	40,0%		48,0%		39,7%	

Source: author, 2020

Then the respondents had to present the situation that they spend an average of 1000 CZK on a visit to a beauty salon and evaluate three offers of discount programs – how attractive they are for them. Again, they used a 10-point scale (1 point - not attractive, 10 points – is very attractive. These are the following three offers:

- Discount card for 5 salon visits: 5% discount on each subsequent visit

- You have a 50% discount for every 5th visit
- You have a discount of CZK 500 for every 5th visit

From the salon's point of view, the three offers are essentially the same: they bring the same income. However, respondents perceive these offers differently: the second and third offers are the most attractive for them. The results are shown in table 17. The total score of the first bid is 45,1%, the second – 59,5%, the third – 60,2%. From this it can be concluded that a discount offer containing large numbers (eg 50%, 500 CZK discount) attracts respondents more than an offer containing small numbers (5%) and the currency is less understandable for customers (more complex system of calculating the amount of discount).

**Table 17: Evaluation of how attractive the listed discounts offers are**

score	Discount card for 5 salon visits: 5% discount on each subsequent visit		You have a 50% discount for every 5th visit		You have a discount of CZK 500 for every 5th visit	
1	19	22%	12	14%	10	11%
2	14	16%	5	6%	7	8%
3	4	5%	8	9%	6	7%
4	5	6%	7	8%	4	5%
5	13	15%	1	1%	12	14%
6	7	8%	8	9%	5	6%
7	6	7%	15	17%	4	5%
8	9	10%	10	11%	17	20%
9	8	9%	4	5%	8	9%
10	2	2%	17	20%	14	16%
Total	392		518		524	
Average	45,1%		59,5%		60,2%	

Source: author, 2020

### 4.3.3 Opinions on the impacts of COVID

The evaluation of the impacts of the COVID epidemic on the consumption of beauty services by respondents was made in this part of the research. These were three questions in which the respondents compared two variants (maximum inclination to the first variant – 1 point, maximum inclination to the second variant – 10 points).

The first question was formulated as follows: “Have you reduced your consumption of beauty services due to the COVID epidemic this year?” 1 point corresponds to full agreement with the statement “I consume services to the same extent as before the epidemic”, 10 points – “I significantly reduced consumption”. The answers of the respondents are given in table 18. It is evident that the respondents are most inclined to the variant that they consume services almost to the same extent as before epidemic: 53 % of respondents gave points less than 5. A smaller proportion of respondents stated that they reduced consumption, however, few respondents stated that this was a significant reduction: 27% of respondents stated an evaluation of 8-10 points.

**Table 18: Evaluation of the impacts of the COVID epidemic on the consumption of beauty services**

score		Score	
1	I consume services to the same extent as before the epidemic	18	21%
2		10	11%
3		10	11%
4		9	10%
5		7	8%
6		3	3%
7		6	7%
8		10	11%
9		8	9%
10	I significantly reduced consumption	6	7%
Total		411	
<b>Average</b>		<b>47,2%</b>	

Source: author, 2020

The next question in this part was: „The reduction in the consumption of beauty services due to the COVID epidemic was in your case caused by: voluntary reduction of consumption ("stay home") (1 point) or forced reduction of consumption (due to the closure of beauty salons) (10 points).

The results of the evaluation are shown in table 19. For this question, it is clear that respondents are more inclined to the option of forced reduction of consumption due the restrictions than to the voluntary restriction, eg due to the “stay home” movement. Rating 8-10 points – the highest tendency to claim about forced consumption restrictions was

reported by 49% of respondents. The “neither yes nor no” (5 points) option was chosen by 14% of respondents – meaning that some respondents reduced consumption for both reasons.

**Table 19: Evaluation of the motives of the reduction of beauty services consumption due the COVID epidemic**

score		Score	
1	voluntary reduction of consumption ("stay home")	5	6%
2		8	9%
3		3	3%
4		3	3%
5		12	14%
6		7	8%
7		6	7%
8		9	10%
9		21	24%
10	forced reduction of consumption, due to the closure of beauty salons	13	15%
<b>Total</b>		577	
<b>Average</b>		<b>66,3%</b>	

Source: author, 2020

The third question examined what had a greater impact on the consumption of beauty services by respondents – forced limited consumption (due to the closure of salons) or reduced consumption due to a decline in their own income, due to the need to save money. The question was: “The reduction in the consumption of beauty services due to the COVID epidemic was in your case caused by: forced reduction of consumption (due to the closure of beauty salons) (1 point) or the need to save money, falling incomes (10 points)”.

The results obtained are shown in table 20. Based on these results, it can be argued that respondents see the reason for the reduction in consumption more in the need to save money and due to the decline in their income than in the forced restriction. This means that the effects of coronavirus measures had a significant effect on respondents' incomes.

30% of respondents gave a rating of 1 to 4 points, ie they stated a greater tendency to claim about a forced reduction in consumption. 59% of respondents gave a rating of 6 to 10 points, which means a greater tendency to claim a decline in income and the need to

save. 11% of respondents gave a rating of 5 points, that is, they stated both variants at the same time, or neither.

**Table 20: Evaluation of the reasons of the reduction of beauty services consumption due the COVID epidemic**

score		Score	
1	forced reduction of consumption, due to the closure of beauty salons	11	13%
2		6	7%
3		7	8%
4		2	2%
5		10	11%
6		3	3%
7		10	11%
8		14	16%
9		9	10%
10	the need to save money, falling incomes	15	17%
Total		533	
<b>Average</b>		<b>61,3%</b>	

Source: author, 2020

The results of the COVID impact assessment are not entirely clear – no convincingly high scores were found on any of the questions. However, the following conclusions can be drawn:

- respondents did not significantly reduce the consumption of beauty tests by respondents at the time of the coronavirus epidemic,
- the reduction in consumption that occurred was mainly due to external causes – the closure of the salon during the quarantine period; and fewer respondents motivated this by the voluntary motive – e.g. by the “stay home” movement,
- the epidemic had significant negative effects on the income of respondents in general – many of respondents reduced the consumption of beauty services just because of this reason.

## **5 Results and Discussion**

In this part, recommendations for beauty service providers are created based on the results of the survey. COVID epidemics on consumer behavior in the beauty services market are also discussed.

### **5.1 Summary of the results of the questionnaire survey**

Based on the results of the survey on a sample of 87 respondents (women, consuming beauty services, living in Prague), the main four assumptions were verified. The starting point in formulation of the assumptions was the book by Dan Ariely (2008).

First assumption: When comparing and choosing alternatives, people not only compare options, but also compare those options that are easily comparable.

This assumption was confirmed: most respondents preferred the very offer, which could be easily compared with another offer and which offers some visible advantage over this other offer. This was a comparison of three variants: Manicure with nail polish OPI + nourishing care, Manicure with nail polish LUXIO + nourishing care, Manicure with nail polish LUXIO. 47% of respondents chose the offer Manicure with nail polish LUXIO + nourishing care.

The second assumption is that people attribute a certain value to a product on the basis of the so-called “anchor” price – a price they had experienced before.

This assumption was confirmed: respondents are willing to accept a little different price from the one they are used to, even if, for example, they are provided with additional benefits (discounts, high quality of service, important recommendations).

The third assumption is, that when something is “FREE” or contains the words “Zero”, “0 CZK” – it is very attractive to people, even if the offer is of no value to them. Because of this, customers behave irrationally and may be willing to buy the service, even if it doesn't really bring anything special.

This assumption has been confirmed. Three variants were compared: Manicure + pedicure services for only 1199 CZK, Manicure + pedicure services for 1199 CZK. Free wine / cocktail! And Manicure services for 700 CZK + pedicure for only 499 CZK!

In conversion, the salon can get the same sales in case of all these sales offering, and these sales variants are equally advantageous for customers. However, the majority of respondents (48%) preferred a variant that included the word “free”: Manicure + pedicure services for 1199 CZK. Free wine / cocktail”

The last assumption concerns the current situation – the effects of the coronavirus pandemic on consumer behavior in the examined sector (beauty services). The coronavirus crisis is thought to have caused a significant drop in demand for beauty services, mainly due to the following reasons: higher propensity to investigate (reduction of income or working hours), forced reduction of consumption (due to the mandatory suspension of body care services), voluntary reduction of consumption (“stay home” movement).

Based on the results of the survey, no unambiguous conclusion can be drawn. At the beginning – the direct question of whether the respondents reduced consumption or not, it was found that the respondents use the services almost to the same extent as before the pandemic. However, on other issues, respondents stated that they had reduced consumption, mainly through government restrictions. Few respondents volunteered for any voluntary reduction in consumption. More than half of the respondents also stated that they felt the need to save and that their income had fallen.

These results can be used for the formulation of several recommendations for beauty service providers.

## **5.2 Recommendations for beauty service providers**

Based on the results of the survey, some companions are formulated for beauty service providers. It is mainly based on the verification of assumptions and other interesting conclusions of the survey on the type of behavior of respondents in the beauty services market.



Recommendations for beauty service providers are:

- Be careful about promoting services through celebrities.

It was found that a direct recommendation of a service by a known person can have the opposite of the desired communication effect: some respondents state that they do not trust known persons at all and therefore it can worsen their perception of the service, reduce the maximum acceptable price for the service.

- Support word-of-mouth channel

It was found that recommendations and reviews are very important for respondents, so service providers must pay attention to the sufficient number, quality and visibility of reviews for their salons. It is important to find out that the recommendations of acquaintances are the most valuable for the respondents, the recommendations of unknown people (eg evaluations on the Internet) are also very important – less than the recommendations of acquaintances, but more than the recommendations of celebrities. Due to this, it is recommended for salons to prioritize such areas of communication as the support of positive word-of-mouth, presence on evaluation portals, sentiment analysis of mentions of the salon on social networks.

- Development and communication of high quality and professionalism of hairdressing services.

When comparing the "anchor" and the maximum acceptable prices, it was found that the factor of quality and professionalism is most important for hairdressing services (less for manicures, pedicures and other beauty services) - it can make respondents willing to pay up to 32,5% of the usual price .

- In the field of facial skincare treatments, it is especially important to build long-term relationships with customers.

Respondents are less sensitive to changes in the situation and offer additional benefits when choosing facial skincare treatments – even in the presence of recommendations from acquaintances and friends, they are not willing to accept higher prices for these services. The factor of high quality and professionalism of the provider can

increase the level of reasonable prices, but less significantly than for other types of services. It is possible to assume that the respondents are not willing to change the beautician to which they are accustomed and are very careful when choosing a new service provider. In the new salon, with which they have no experience, they are willing to spend less than they are used to – the so-called "rehearsal".

- Massage service providers should offer discounts if they want to attract more customers and increase the level of affordable prices.

This recommendation is based on the results of the evaluation of massage prices, which are less reliable (about a third of the respondents participated in the evaluation. However, these indicative results show that discounts can significantly affect the attractiveness and acceptable price of massages.

- Service providers can designate a special „bait“ - a service that can be easily compared to another service and which offers a visible "extra" advantage

Confirming the assumption of „bait“ preference makes it possible to make this recommendation.

- The discount offer should contain large numbers (eg 500 CZK discount, 50% discount, etc.)

The results of the survey show that discount offers that mention large numbers are more attractive to respondents than offers containing small numbers (eg 5%). These offers both for the salon mean the same income (and the same spending for customers), but the wording of the discount offer attracts customers differently.

It is obvious that the sample on which the assumptions were examined is relatively small: it included 87 respondents. However, the structure of the sample was carefully monitored: they were to be typical consumers of beauty services – women living in Prague and using selected beauty services. Attempts were also made to obtain answers from different respondents – address them in various ways (electronic, printed questionnaires), and avoid addressing only own friends and students (eg the VypInto portal made it possible to address completely unknown respondents, visitors to this portal).

### **5.3 Discussion on the effects of the COVID epidemic on the consumption of beauty services**

The COVID pandemic has undoubtedly affected economy as a whole, and especially a beauty industry. The first phase of the fight against the COVID-19 epidemic took place between March and May 2020. The second phase of the fight followed – a transitional one. The closed economy has gradually opened up. In the third quarter, the economy grew significantly compared to the second quarter of 2020, according to CNB data (Tomáš, Aleš, 2020). The third phase was supposed to be robust growth, but the second wave of the disease arrived. There was a re-lockdown.

The Prague economy is often referred to as vulnerable due to restrictions on coronavirus. The reason is the large share of services and the dependence of many of them on foreign tourists (Pommer, 2020). According to research by Czech banks (Gallistl, 2020), the risk sectors are mainly those that have ceased operations first, ie tourism or restaurants. Affected companies are also connected mainly to the automotive industry, hotel industry, tourism, shopping centers and also in many other fields, said Petr Hutla, a member of the ČSOB Board of Directors (Gallistl, 2020). A major threat is the pandemic for small and medium-sized enterprises (Pixabay, 2020), which account for a significant share of the beauty services sector. Further economic growth (growth rate of 2,1% is expected in 2021 in Czech Republic) should be driven mainly by domestic consumption (ČTK, 2019). Many companies in the beauty services sector will depend on stable consumption. As chief of New and Media Holding M. Teplica states (Teplica, Krasko, 2020), the key will be consumption, the decline in which has not yet fully manifested itself. CETA analyst M. Hejl stated (CETA, 2020), that the economic winner of the pandemic crisis will be the one who keeps household consumption in check. If people believe that bad times are coming, they will stop spending money, start saving, and those bad times – for service providers – will actually come. From this it can be clearly stated that the support of consumption should be one of the key tasks of companies in times of pandemic.

The results of the own investigation show that respondents did not significantly reduce the consumption of beauty tests by respondents at the time of the coronavirus

epidemic. This finding is positive from the point of view of companies in the beauty services sector. It is understandable that this is a conclusion based on research from a small sample of consumers (87 women from Prague), and this finding cannot be applied to the entire industry. At present, however, not enough extensive surveys of the impacts of COVID on consumption have been carried out. There are only media articles and research of individual organizations and banks, which do not specifically take into account the topic of beauty services.

However, other results of our own investigation showed that there was a certain reduction in the consumption of beauty services due to closure of the salon during the quarantine period. The return to deferred consumption due to the reopening of the salon is an optimistic expectation of companies. They can prepare for it now. The marketing promotions mentioned in this work are therefore very current. Further research – at the level of the whole industry and at the level of individual companies – can help to examine the current situation and customer requirements.

## 6 Conclusion

The thesis was focused on the topic of behavioral economics questioning and its influence on human decisions. The main attention was paid to the own research of the consumer behavior in the field of beauty services. The main objective of the thesis is to examine the most common behavioral biases and their impact on human behavior.

The own research, based on the questionnaire survey method was carried out. Based on a literature search of the theory of behavioral economics, assumptions were made regarding the rational and irrational behavior of consumers. They concern in particular the following issues:

- “bait” to support the sale of a specific product: people choose the offer (so-called “bait”), which is easily comparable to another offer and contains something obviously extra compared to it. Other variants of offers that are not easily comparable to “bait” are not taken into account by the consumer;
- the effect of the “anchor” price on further price decisions (on the maximum acceptable price under the conditions of providing additional benefits, positive recommendations, changes in the situation): when considering the maximum acceptable price of a new offer, the consumer takes into account his „anchor“ price, to which he is accustomed;
- irrational behavior when something is offered as “FREE”: when deciding between offers that have essentially the same value and offer the same benefit, the consumer chooses an offer that explicitly contains something “free”.

The research also examines assumptions about changes in consumer behavior due to the COVID pandemic, concerning the limitation of the consumption of beauty services and the reason for the limitation of this consumption (forced, voluntary, financial reasons).

The established assumptions were confirmed for the examination of a sample of 87 women from Prague. Respondents chose the “bait” offer, took into account the “anchor” price when deciding on the maximum acceptable price of the service, chose the offer that contains something “free”.

Other interesting conclusions were also drawn from the results of the survey. For example, it has been shown that customers' beliefs in the quality and professionalism of service providers can significantly increase the attractiveness of their offers and increase prices accepted by respondents. For example, in the case of manicure services, the acceptable price can be increased by up to 24%, pedicures – by 18%, hairdresser's – by 32,5%. This factor has a less significant effect on the increase in the acceptable price in the case of massage services (+14,5%) and eyebrow shaping (+8,6%). This factor may increase interest in using the services, even though previously customers did not use the service at all.

The recommendations of acquaintances can cause an increase in the acceptable price of services, but less significant – by a maximum of 14-15% (for manicures and pedicures). Discounts can support the sale of services (especially massages) at higher prices.

When evaluating the attractiveness of a special offer, they do not think about responding carefully to the benefits that these offers bring: they often choose simply according to how attracted by the communication message itself. The most attractive for customers are offers that mention the words “free” or contain significant numbers for a discount (eg 500 CZK, 50%).

It can be argued that the principles of behavior economics, described in this work, should be used in the practice of companies for more effective knowledge and adaptation to customer requirements. In times of crisis and due to fierce competition in the market, these principles are particularly important.

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## **8 Appendix**

Appendix A Questionnaire .....	84
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## Appendix A Questionnaire

Dear Madam, dear Sir,

This questionnaire is created for the purposes of processing the diploma thesis at the Czech University of Life Sciences Prague. It is intended only for women permanently living in Prague. If you do not belong to this group, please do not fill in the questionnaire.

The theme of my diploma thesis is Behavioral economics. I want to access the view of women on the beauty services and explore their behavior on this market. I believe that a good knowledge of customer behavior and needs will help companies improve their services.

I am happy to get feedback – your recommendation in relation to the questionnaire and its structure. You can find a place to express your opinions at the end of this form. Thank you in advance for your time and I wish you much success.

Regards,

Bc. Dauriya Shapikhanova

### 1. Which beauty services do you use? How often? (mark with a cross):

	<i>Never</i>	<i>Unsystematically</i>	<i>Systematically</i>
Manicure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Pedicure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hairdresser's	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Facial skincare treatments	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Eyelash treatment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Eyebrow shaping	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Massages	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## Prices of the beauty services

2. What amount do you usually spend for one treatment within the provision of these services (in CZK). If you do not use the service, leave the box blank.

	<i>Average price for 1 treatment, CZK</i>
Manicure	..... CZK
Pedicure	..... CZK
Hairdresser's	..... CZK
Facial skincare treatments	..... CZK
EYELASH TREATMENT	..... CZK
EYEBROW SHAPING	..... CZK
MASSAGES	..... CZK

3. Please indicate how much you are willing to spend for 1 given service (maximum) if you are convinced of the very high quality and professionalism of the service provider (manicurists / hairdressers / beauticians...):

	<i>Maximum price for 1 treatment, CZK</i>
Manicure	max..... CZK
Pedicure	max..... CZK
Hairdresser's	max..... CZK
Facial skincare treatments	max..... CZK
Eyelash treatment	max..... CZK
Eyebrow shaping	max..... CZK
Massages	max..... CZK

4. Please indicate how much you are willing to spend for 1 given service (maximum) if the services are highly recommended by a friend

	<i>Maximum price for 1 treatment, CZK</i>
Manicure	max..... CZK
Pedicure	max..... CZK
Hairdresser's	max..... CZK
Facial skincare treatments	max..... CZK
Eyelash treatment	max..... CZK
Eyebrow shaping	max..... CZK
Massages	max..... CZK

5. Please indicate how much you are willing to spend for 1 given service (**maximum**) if the services are **highly recommended by a famous person** (eg a positive mention of an actress you like on a social network)

	<i>Maximum price for 1 treatment, CZK</i>
Manicure	max..... CZK
Pedicure	max..... CZK
Hairdresser's	max..... CZK
Facial skincare treatments	max..... CZK
Eyelash treatment	max..... CZK
Eyebrow shaping	max..... CZK
Massages	max..... CZK

6. Please indicate how much you are willing to spend for 1 given service (**maximum**) if the services are provided in a **new salon**, which does not yet have many reviews and ratings, but the **salon looks very nice** and is **close to your home**

	<i>Maximum price for 1 treatment, CZK</i>
Manicure	max..... CZK
Pedicure	max..... CZK
Hairdresser's	max..... CZK
Facial skincare treatments	max..... CZK
Eyelash treatment	max..... CZK
Eyebrow shaping	max..... CZK
Massages	max..... CZK

7. Please indicate how much you are willing to spend for 1 given service (**maximum**) if the services have a **limited time discount of 15%**

	<i>Maximum price for 1 treatment, CZK</i>
Manicure	max..... CZK
Pedicure	max..... CZK
Hairdresser's	max..... CZK
Facial skincare treatments	max..... CZK
Eyelash treatment	max..... CZK
Eyebrow shaping	max..... CZK
Massages	max..... CZK

8. Please indicate how much you are willing to spend for 1 given service (maximum) if the services have a limited time discount of 30%

	<i>Maximum price for 1 treatment, CZK</i>
Manicure	max..... CZK
Pedicure	max..... CZK
Hairdresser's	max..... CZK
Facial skincare treatments	max..... CZK
Eyelash treatment	max..... CZK
Eyebrow shaping	max..... CZK
Massages	max..... CZK

### **Opinions on discounts and special offers of beauty services**

1. You have a choice of three types of services, which variant would you probably choose?

- d) Manicure with nail polish OPI + nourishing care
- e) Manicure with nail polish LUXIO + nourishing care
- f) Manicure with nail polish LUXIO

1. Please rate how attractive the following offer is for you:

"Manicure + pedicure services for only 1199 CZK"

*Scale from 1 to 10: not entirely attractive --- very attractive*

2. Please rate how attractive the following offer is for you:

"Manicure + pedicure services for 1199 CZK. Free wine / cocktail! "

*Scale from 1 to 10: not entirely attractive --- very attractive*

3. Please rate how attractive the following offer is for you:

"Manicure services for 700 CZK + pedicure for only 499 CZK!"

*Scale from 1 to 10: not entirely attractive --- very attractive*

**4. Imagine that you spend 1000 CZK for one visit to the salon. Evaluate how attractive the following offer of this salon is for you?**

a) Discount card for 5 salon visits: 5% discount on each subsequent visit

*Scale from 1 to 10: not entirely attractive --- very attractive*

b) You have a 50% discount for every 5th visit

*Scale from 1 to 10: not entirely attractive --- very attractive*

c) You have a discount of CZK 500 for every 5th visit

*Scale from 1 to 10: not entirely attractive --- very attractive*

### **Opinions on the impacts of COVID**

Have you reduced your consumption of beauty services due to the COVID epidemic this year?

I consume services to the same extent as before the epidemic

*---- Scale from 1 to 10 ----*

I significantly reduced consumption

The reduction in the consumption of beauty services due to the COVID epidemic was in your case caused by:

voluntary reduction of consumption ("stay home")

*---- Scale from 1 to 10 ----*

forced reduction of consumption (due to the closure of beauty salons)



The reduction in the consumption of beauty services due to the COVID epidemic was in your case caused by:

forced reduction of consumption (due to the closure of beauty salons)

---- *Scale from 1 to 10* ----

the need to save money, falling incomes

### **Identification questions**

Your age:

- a) Less than 18 years
- b) 19-25 years
- c) 26-35 years
- d) 36-45 years
- e) 46-55 years
- f) More than 55 years

You are:

- a) Student
- b) Employer
- c) Businessman
- d) Unemployed person
- e) On maternity leave
- f) Pensioner

Your average monthly income:

- a) Less than 18,000 CZK
- b) 18,000-25,000 CZK

- c) 25.000-35.000 CZK
- d) 35.000-45.000 CZK
- e) 45.000-55.000 CZK
- f) More then 55.000 CZK

A place to express your feedback and make recommendations:

Source: Author, 2020