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CLASSIFICATION OF NEEDS IN THE CONTEXT OF BEHAVIORAL ECONOMICS

КЛАСИФІКАЦІЯ ПОТРЕБ У КОНТЕКСТІ ПОВЕДІНКОВОЇ ЕКОНОМІКИ

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The study is devoted to the problem of classification of needs in the context of behavioral economics. The article examines the existing classifications and the expediency of their use for the analysis of social phenomena. The main goal of the research is to create a generalized classification of needs for practical application in the analysis of behavioral processes. The proposed classification includes useful and previously incompatible elements of individual theoretical works. A new approach is proposed, which has absorbed the positive qualities of existing concepts and expands their boundaries. An extended classification of needs for practical application in the analysis of behavioral processes is proposed. This classification includes useful and previously incompatible elements of separate theoretical works, such as an expanded list of needs, the addition of factors that are motivating for human behavior, and destructive needs. What is new in the approach is the division of needs into three types depending on the level of their necessity for life, namely: necessary for survival, generally desired and specific needs. Thus, the new classification takes into account and extends existing approaches and can be useful for descriptive analysis in the context of behavioral economics. The results of the research are relevant in the context of modern economic science, as understanding needs and their classification can be useful for solving socio-economic problems. The practical application of the new classification can help in the development of effective management and marketing strategies, as well as in the analysis of the behavior and motivation of the subjects of choice, such as product consumers, investors, etc.

Keywords: classification of needs, behavioral economics, motivation theory, hierarchy of needs, analysis of behavioral processes.

Дослідження присвячено проблемі класифікацій потреб у контексті поведінкової економіки. У статті досліджуються існуючі класифікації та доцільність їх використання для аналізу соціальних явищ. Основною метою дослідження є створення узагальненої класифікації потреб для практичного застосування в аналізі поведінкових процесів. Запропонована класифікація включає в себе корисні та непоєднувані до того елементи окремих теоретичних робіт. Запропоновано новий підхід, який увібрав позитивні якості існуючих понять та розширює їх межі. Запропоновано розширену класифікацію потреб для практичного застосування в аналізі поведінкових процесів. Дана класифікація включає в себе корисні та непоєднувані до того елементи окремих теоретичних робіт, такі як розширений перелік потреб, додавання чинників, які є мотивуючими для людської поведінки, та деструктивних потреб. Новим у підході є поділ потреб на три види залежно від рівня їх необхідності для життя, а саме: необхідні для виживання, як правило бажані та специфічні потреби. Для ефективної систематизації сформованих результатів дослідження, в статті було використано два методичні підходи. Першим способом було використання систематизації та схематичного зображення, що наочно відображає основні види потреб за трьома напрямками: потреби, необхідні для виживання, тощо); специфічні потреби (позитивчи біологічні потреби; бажані потреби, такі як належність (родина та друзі тощо); специфічні потреби (позитивні та негативні звички). Такий графічний підхід дозволяє систематизувати інформацію, швидко зрозуміти основну концепцію та комплексно підійти до аналізу потреб. На основі графічного зображення ранжування потреб, було створено ґрунтовну класифікацію, що містить детальну інформацію про різноманіття видів потреб, їх складові компоненти, характеристики та приклади. Така розгорнута класифікація надає докладну інформацію про кожен тип потреб та дозволяє легко порівнювати їх за різними видами. Така систематизація надає можливість дослідникам та практикам швидко і точно відобразити потреби в певній ситуації, що може бути корисно при прийнятті практичних рішень. Таким чином, запропонована класифікація враховує та розширює існуючі підходи до систематизації потреб та може бути корисною для дескриптивного аналізу в контексті поведінкової економіки. Результати дослідження є актуальними в контексті сучасної економічної науки, оскільки розуміння потреб та їх класифікація можуть бути корисними для вирішення соціально-економічних проблем. Практичне застосування нової класифікації може допомогти в розробці ефективних стратегій управління та маркетингу, а також аналізу поведінки та мотивації суб'єктів вибору, таких як споживачі продукції, інвестори тощо.

Ключові слова: класифікація потреб, поведінкова економіка, теорія мотивації, ієрархія потреб, аналіз поведінкових процесів.

Objective. Recently, various branches of economic theory have been actively developing. Behavioral economics is becoming more and more widespread, trying to explain social phenomena that are complex and usually considered in the context of monetary relations. This field of study aims to understand the reasons for people's choices and motivations. These aspects often rely on a single basis – needs. However, can the modern theory of needs explain a wide range of human activities?

Well-known and recognized concepts are undoubtedly useful for understanding human behavior. However, can they serve as a basis for analyzing everyday life: choosing the products we buy in the supermarket, reacting to different types of advertising, preferring one car over another, buying potentially harmful products such as cigarettes or drugs, deciding to live in another city or country, or donating personal funds for the welfare of friends? All these seemingly familiar behaviors are difficult to reconcile with the existing theoretical framework. And the reason for this is that motivation theories and recognized classifications of needs have not been developed for use in this context.

That is why it is advisable to form an extended classification that will be adapted to the current needs of economic science and contain the main foundations of the theoretical framework for analyzing behavioral phenomena. This classification of needs should become an important component for generalizing existing knowledge, especially in the context of creating a behavioral choice model aimed at explaining a wide range of behavioral phenomena using one universal algorithm.

Analysis of recent research and publications. Abraham Maslow's research [1] is fundamental, with the main idea being the hierarchy of needs. The problem of motivation

was also studied by the American psychologist David Clarence McClelland [2], who investigated the desire for belonging, power, and achievement. His idea was expanded by M. Todd Royle and Angela T. Hall [3].

Regarding modern research approaches, Yaroshenko Yanina [4] identifies five main types of needs and suggests including not only those needs that are useful to the individual. In his turn, I. T. Ondabu [5] expanded the list of needs and classified them by the standard of living. Also, H. Tezcan Uysal and Emine Genç [6] studied the change in the priority of needs depending on the field of activity. S. K. Tan studied the two-factor theory of motivation [7].

Also, problems related to the needs and practical application of existing classifications were studied by such Ukrainian scientists as D. S. Butenko [8] and O. F. Protasenko [9] and others.

As we can see, the scientific literature presents many theoretical approaches to the classification of needs, focusing on their priority, nature, and differences between representatives of different classes or professions. However, these studies do not fully correspond to the expediency of using them to analyze behavioral phenomena. Since such approaches are not complete and thorough, and some of them are quite difficult to apply in practice.

The purpose of the article is to comprehensively analyze theoretical approaches to the systematization of needs and to create a generalized classification for practical application and analysis of behavioral phenomena as a theoretical basis for studying the motivation of consumers, sellers, investors and other market participants.

Results of the study. When analyzing theoretical approaches to the classification of needs, it is advisable to focus on the classical theories that are basic in economic theory.

The most influential of these is Maslow's hierarchy [1]. The scientist believed that a person should satisfy a more basic level of needs before moving on to the next one. In his works, Maslow suggested that there are a number of exceptions to this rule. Here are some cases that the hierarchy does not cover:

 a person can read a book even if they are a little hungry;

- a man in love can neglect the need to drink water for several hours if he stays with his loved one a soldier for whom state or social interests are higher than his own safety.

However, Maslow's concept does work in one specific context: when it comes to choosing between extreme scarcity of needs. For example, imagine a person who has not eaten or read anything for a long time. If this person is offered food and a book that he or she wants to read, then the person's choice will be obvious. Maslow used such cases to confirm a hierarchical structure, so we can assume that in this case our choices go through the ladder of needs one by one. But even in this context, we have certain problems related to high-level needs. In some cases, their prioritization is not the same as suggested by Maslow.

McClelland [2] classifies key motivators into three main elements: the need for achievement, affiliation, and power. However, this approach does not cover absolutely all of our possible choices. For example, there is a person who usually lies on the couch and watches TV. Does he need achievements, affiliation, or power? Of course, the lack of achievement explains why this person doesn't go to work or develop. But what really drives them?

A study by M. Todd Royle [3] from Valdosta State University and Angela T. Hall from the University of Texas at San Antonio shows us that achievement motivation is the strongest predictor, followed by belonging and power. Yaroshenko Yanina [4] lists the following types of needs:

 biological (oxygen, water, food and energy, physiological needs, movement, relaxation and sleep, hygiene, clothing and shelter, sexual needs);

social (love, respect, freedom);

existential and prestigious (safety, psychological security and personal comfort);

– spiritual needs (cognition, selfknowledge, creativity and creation, aesthetic needs, self-improvement, meaning of life, selfactualization, transcendental needs);

– quasi-needs (the satisfaction of which leads to physical and spiritual degradation such as gluttony, hatred, self-deprecation).

The author proposes two interesting scientific approaches to the classification of needs. First, in modern life, existential and spiritual needs are the most important for our decisions. Second, there are not only "good" needs. It also matters what place they occupy in a person's personal hierarchy.

In his theory of human motivation, I. T. Ondabu [5] classifies needs into classes: low, medium, and high (Table 1).

It is also worth considering the research of H. Tezcan Uysal and Emine Genç [6]. These scientists divide people into groups according to their occupation. The purpose of conducting the relevant research and building such a classification was to help managers better understand the needs of the employee. Methodological tools such as data analysis and SPSS were used in the course of the research. The reliability coefficient of the 5-digit scale was determined to be 0.961.

For example, lawyers on average have less need for love and belonging, but more need for respect and self-actualization. Bank employees, waiters, and factory workers have a normal distribution of needs. Teachers, private security

Table 1

High class motivators	Middle class motivators	Low class motivators		
Reputation Recognition Appreciation Achievement Respect from others Worth Capability	Good wages Job Security Physical security Pension for the old Life insurance cover Love Affection	Good wages Food Shelter Clothing Rest Air		
Pride	Friendship	Water		
Position	Interaction	Sleep sexual satisfaction		
Status	Need to admire and be admired			

Key motivators in Tirimba's grouping theory

guards, and pharmacists have a lower level of self-actualization needs. The needs of nurses have strong deviations. Their needs for safety and respect are much higher than average, but their needs for love and belonging are quite low.

Thus, the analysis of theoretical approaches to the classification of needs revealed a wide variety of classification features and approaches to the identification of basic components. Each group of scholars offers its own approaches to classification depending on the context of the study or on subjective observations of human behavior in society and its basic needs or driving motives.

So, if we consider some classification approaches from the perspective of the objects of choice, the classification will be quite local and significantly narrows or even makes it impossible to apply it to other cases, especially when money, country, etc. are not of primary importance.

If we divide the needs into those necessary for existence and all others, then a number of problematic issues arise. For example, for most people, the need to start a family is basic. However, it is possible to live without it, especially if life is supported by other positive needs (for example, fulfillment of a religious task), then the need to create a family will no longer be basic for this person.

In our opinion, a generalized classification of needs by the degree of necessity should be classified into three main groups and contain the following components, as shown in Figure 1.

As can be seen from Fig. 1, it is advisable to divide needs into three main groups according to the degree of necessity:

necessary for survival, i.e. physiological or biological needs;

desirable needs, such as belonging (family and friends);

specific needs (habits).

These approaches require more detailed explanation. Therefore, for the purpose of validity and disclosure of the possibilities of practical application, a generalized classification was built that characterizes and reveals the peculiarities of the application of needs by the degree of necessity (Table 2).

As can be seen from Table 2, the proposed classification includes an extended list of needs and motivations that influence our daily behavior. These needs can be both positive (care, love, etc.) and potentially negative (anger, smoking, gambling, etc.). The division of needs into three main categories helps to understand



Figure 1. Classification of needs by degree of necessity

Table 2

Classification of needs by degree of need				
Types of needs	Components of needs	Characteristics	Examples	
Essential for survival	Physiological	Needs related to survival and maintenance of life	Water, food, shelter, sleep, sex	
	Safety and security	The need for protection from risks, dangers and fears related to physical and emotional well-being.	Personal and family safety, security of residence, protection from natural disasters and emergencies.	
	Health	The need to preserve and maintain physical and mental health.	Medical care, hygiene, recreation, physical activity, etc.	
Mostly desirable	Social	Interaction with society, social belonging, identity.	Support and respect of others, "human warmth", social status and recognition, family and kinship ties, etc.	
	Emotional	The need for emotional experiences, both positive and negative.	Joy, pleasure, or fear, anger; the need for emotional expression and intimacy with other people.	
	Personal development	Continuous self-improvement and growth as a person, professional, expert, etc.	Knowledge and learning, competence and career development, creativity and innovation, contribution to science, culture, social well-being, etc.	
	Self- expression	Expression of one's own individuality through the use of one's talent and development in this direction; desire to meet one's own needs, to do what one loves	Appearance, creativity (music, art, literature), social media and television, fashion and style, etc.	
	Recreation and entertainment	The need to change the usual rhythm of life, rest, and enjoyable activities.	Hobbies and interests, recreation, entertainment and travel, cultural events, etc.	
	Material	Material well-being, income stability, meeting basic needs, as well as the desire for material luxury and comfort.	Monetary income, luxury and comfort, access to technology and information, etc.	
Specific	Needs formed by habits	Needs that arise as a result of prejudices, habits and environmental influences. These needs can have both positive and negative effects.	The need for sweets, hobbies, sports, coffee in the morning, etc. The need to use social media, smoking, alcohol, gambling.	
	Religious	Needs related to religious beliefs and spiritual life practices.	Self-awareness, self-esteem and self-acceptance, morals, beliefs, cultural identity.	
	Altruistic	The desire to help others, out of moral conviction, compassion for human suffering, etc.	Charity, social responsibility, volunteering. Providing financial assistance to people in difficult life situations, caring for others.	

Classification of needs by degree of need

the likelihood of an individual being affected by certain needs and the nature or sources of their formation.

Twelve components in the classification of needs allow for a comprehensive approach to analyzing and determining the reasons for the behavior of selected subjects. This approach makes it possible to build a "consumer profile" more accurately, to identify the main driving needs and motives.

It should be noted that the division of types of needs into three main categories is currently purely subjective. For each individual person, the priority of these needs will be different. So, for example, if a certain type of need is included in the category of "desired needs", this does not mean that all of these needs will be inherent in every person. We assume that the vast majority of people have at least one of the listed needs in this category.

It is also worth noting that the list of possible needs only includes a number of those needs that can help to understand the type of needs and add new motives to it if necessary.

Conclusions. Thus, we have built and described an extended classification of needs

for use in the context of behavioral economics. The proposed classification is more extended and meaningful, and has practical implications for the analysis of such social phenomena as consumer choice, motivation for action or inaction, preference of one product or service over another, individual behavior in a particular market, global issues, etc. However, to understand the above phenomena, it is not enough to list needs. Therefore, the description of the nature of needs is yet to be considered in further research.

REFERENCES:

1. A. H. Maslow (1943). A Theory of Human Motivation. Psychological Review. № 50. P. 370–396.

2. D. C. McClelland (1976). The achieving society. New York, Irvington publishers, 530 p.

3. M. Todd Royle, Angela T. Hall (2012). The relationship between McClelland's theory of needs, feeling individually accountable, and informal accountability for others. *International journal of management and marketing research*, vol. 5, num. 1, pp. 21–42.

4. Yarochenko Y. (2019). Philosophical approach to the classification of needs of a human being in 21st century. Riga, Latvia, April 6, pp. 8–11.

5. I. T. Ondabu (2014). A Theory of Human Motivation: The Tirimba Grouping Theory of Motivation. SOP Transactions on economic research, Volume 1, Number 1, January, pp. 16–21.

6. H. T. Uysal, S. Aydemir, E. Genç (2017). Maslow's hierarchy of needs in 21st century: the examination of vocational differences, pp. 211–227.

7. S. K. Tan (2013). Herzberg's Two-Factor Theory on Work Motivation: Does it Works for Todays Environment? *G.J.C.M.P.*, vol. 2(5), pp. 18–22.

8. Butenko D. S. (2020). Theories of motivation: practical aspect. *Effective economy*. No. 5. Available at: http://www.economy.nayka.com.ua/?n=5&y=2020.

9. Protasenko O. F., Potemkina M. O. (2021). The role of the ecological needs of the citizen in the development of ecological security / Ecological security – modern directions and prospects of higher education: materials of the 1st international. Internet conference, February 25, 2021: theses add. Kharkiv: Kharkiv National University named after V. N. Karazina. P. 114–116.

СПИСОК ВИКОРИСТАНИХ ДЖЕРЕЛ:

1. А. Х. Маслоу. Теорія мотивації людини. Психологічний огляд. 1943. № 50. С. 370–396.

2. Д. К. Макклелланд. Суспільство, що досягло успіху. Нью-Йорк, видавництво Ірвінгтон, 1976. 530 с.

3. М. Тодд Ройл, Анжела Т. Холл. Взаємозв'язок між теорією потреб Макклелланда, почуттям індивідуальної відповідальності та неформальною відповідальністю за інших. *Міжнародний журнал менеджменту та маркетингових досліджень*. 2012. Том 5, № 1. С. 21–42.

4. Яроченко Ю. Філософський підхід до класифікації потреб людини у 21 столітті. Рига, Латвія, 6 квітня 2019 р. С. 8–11.

5. І. Т. Ондабу. Теорія мотивації людини: теорія мотивації групування Тірімба. *Транзакції СОП з економічних досліджень*. Том 1, № 1, січень 2014. С. 16–21.

6. Х. Т. Уйсал, С. Айдемір, Е. Генч. Ієрархія потреб Маслоу в 21^{ст.}: вивчення професійних відмінностей. 2017. С. 211–227.

7. С. К. Тан. Двофакторна теорія мотивації праці Герцберга: чи працює вона для сучасних умов? *G.J.C.M.P.* 2013. Том 2(5). С. 18–22.

8. Бутенко Д. С. Теорії мотивації: практичний аспект. *Ефективна економіка.* 2020. № 5. URL: http://www.economy.nayka.com.ua/?n=5&y=2020.

9. Протасенко О. Ф., Потьомкіна М. О. Роль екологічних потреб працівника у розвитку екологічної безпеки / Екологічна безпека – сучасні напрямки та перспективи вищої освіти : матеріали І міжнар. інтернет-конф., 25 лютого 2021 р. : тези допов. Харків : Харківський національний університет ім. В. Н. Каразіна, 2021. С. 114–116.