INFLUENCE OF FORMAL AND INFORMAL INSTITUTIONS ON TRANSFORMATION OF BEHAVIOR COMPETENCES IN THE FIELD OF HEALTH PRESERVATION

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In modern conditions the economic science still has not developed a unified understanding of the role of health care in the rational organization of the working environment in the enterprise. The purpose of the article is consideration of forming a rational behavior of economic agents at the enterprise level based on the interactions of formal and informal institutions, resulting in a transformation of values in the field of health savings through the application of new knowledge. The hypothesis of the research is the presence of the influence of formal and informal institutions for behavioural installation in the system of health care. The study is based on institutional approach, allowing to identify features of institutional arrangements and value orders of magnitude, considering not only legal and recorded in a formal way rules, how much of the agreement as a set of informal norms, according to which the interaction between people in a particular area of their activities. The novelty of the research is to study the impact of mental models culture of health care to limit the irrational behaviour of employees. On the basis of the systematization of scientific approaches characterized by system of formal and informal institutions that influence the behavior of health care. For experimental confirmation of the hypothesis about the importance of establishing an effective regulatory environment in January-February of 2015, a survey was conducted at the number of industrial enterprises of Perm and Perm region (JSC Saranovskaya Mine Rudnaya, JSC Motovilikhinskiye Zavody, Barma Ltd., Perm Engine company Ltd),. The results of a study of attitudes of employees of enterprises in Perm region allow us to conclude about the existence of cognitive constraints that shape irrational behavior in the field of health.

Keywords: health preservation, formal and informal institutions, rational behavior, behavioral values.

Modern economic situation dictates the enterprises the terms of innovative transformations necessity, without which it is unthinkable to provide progress and economic well-being of both businesses and the country as a whole. Only continuous innovative development based on new knowledge will enable the company to have a long-term competitive advantage and obtain stable incomes. The situation of innovative development in our country can be described as difficult one due not only to lack of financial funds, but also to the lack of the main resource of any innovative activity, human capital, able to implement innovations.

Taking into account the key role of human capital for effective innovation, it is necessary to adjust the personnel management system considering the characteristics of the enterprise activity under conditions of innovative transformations and possibilities of maximizing productivity of human capital.

Human capital becomes the main value of society at the present stage of the knowledge economy development, it determines the vector of sustainable development because competitive advantages of the enterprise and overall economic system are largely achieved not with material resources, but with knowledge, information and
Mainstreaming the issues of human capital reproduction and management under the conditions of necessity to find a new way of development is determined with the magnitude of the demand and the rational use of new knowledge.

A significant impact of these trends on the methodology of economic science is determined by the fact that a person, actually existing and in the most cases following the models of irrational behavior caused by cognitive errors, is the foundation of modern economic research. Along with cognitive behavioral errors the state of human capital is characterized with increasing threat of severe environmental problems influence on its state emanating from the negative results of human activity [16, p. 102].

At the same time, employers begin to pay greater attention to managing not only physical but also human capital of the enterprise following the rational changes of employees’ attitudes. It necessitates the development of new modern concept of human capital management of the company, which is based on the concept of transition from the analysis of the forms of human interaction with the means of production through the study of forms of interaction between people to the mechanism of cultural origin – an independent group of behavioral regulators that form the basis of the mechanisms of a different nature in the frames of working activities [10, p. 91].

This conclusion, from our point of view, can be applied to the study of the process of human capital formation in the system of economic relations between the employer and the employee. In this case, the needs of employees, their economic interests, values and attitudes, i.e. motivations to engage people in labour relations, act as major factors in the formation of human capital. This point of view is confirmed with the allocated systematized characteristics of the human capital, described by Kapelyushnikov R., Dyatlov S., Becker G., Dobrynin A.

There are many different factors influencing on the formation of human capital of the enterprise. The culture of the organization is an important non-economic factor, which contributes to a coherent and focused process of human capital formation [8, p. 48].

However the practice and results of human capital research at the enterprise level reveal the process of constant changes in the field of values and guidelines of the leadership in the direction of investments growth in human capital, assuming growth of returns from these investments resulted in productivity growth. But it does not change values of employees in relation to the effective management of the processes of reproduction of human capital individual elements, in particular it relates to capital of health. It is probably determined by the lack of awareness of the employees about the change of value orientations of the employer. The results of the research showed that only 19 % of workers know that the Collective agreement of the enterprise contains the obligation of management on occupational safety and health of workers, 70% are not informed that the management of the enterprise carries out or should carry out such activities, and only 5% of respondents could name special programs on the preservation and enhancement of workers’ health implemented in the enterprise [14, p. 402].

Issues of diagnosis and treatment substantially outweigh the prevention, the paradigm of active preservation and restoration of health in such system of workers’ health protection at the modern enterprise. The healthcare system in the Russian Federation in its present form focuses mainly on control over already existing disease and is not objectively able to radically improve the health of our population. It must be replaced with a single health-saving policy, the essence of which is the preservation and development of human capital, one of whose functions is to ensure the health of a healthy person [1, p. 34].

The behavioral factor is the bridge, the mediating link between health and the main groups of factors influencing health, i.e. genetics, environment, health, socio-economic and socio-demographic factors [28, p. 154]. The behavior of the employee at the enterprise, including health-saving behavior, is formed under the influence of both formal and informal institutions.

In this study we rely on the definition of the institute given by G. Kleiner. From his point of view any institute is an independent socio-economic system, which consists of the following environmental intra-institutional subsystems: the mental, cultural, institutional, cognitive, proprietary technology, simulation and historical ones [12].

Taking into account health-preservation issues the institutions are designed to perform two main functions: to meet the needs of the individual in maintaining health and to regulate the status of the health care environment.

Formal health-saving institutions include:
- the level of state funding for the health sector;
- legal regulation of the health care system;
In the Constitution of the Russian Federation each person is guaranteed with the right to health protection and medical care [13]. The Federal Law "About the basis of public health protection in the Russian Federation" dated November 21, 2011 № 323 identified sanitary and anti-epidemic prevention and prevention of socially significant diseases, measures to preserve the life and health of citizens in the process of study and work as priorities [25].

The concept of health system development till 2020 is aimed at preserving and strengthening the health of the population on the basis of a healthy lifestyle and improve the availability and quality of care.

Informal institutions influencing health-saving environment, include:

- cultural traditions that define the attitude to health as a value;
- rules of behaviour, which are not conducive to the maintenance of health.

It should also be noted that the approach to the problem of health-behavior formation of employees is possible not only from the standpoint of physical health, but also of harmony and unity of physical, mental and spiritual components of health. Maturity of all three components allows the employee to become a self-developing personality, able to combine integrative creative, spiritual and moral, intellectual start, be psychologically resilient to stress [11, p. 111]. These settings should not be imposed from outside, as the forcefully imposed idea of a healthy lifestyle can bring the opposite of the desired result. This phenomenon in modern research has been called healthism [18, p. 497].

Value-oriented management of human capital at the modern enterprise, aimed at transforming the workers values, would resolve the contradictions that contribute to the relevance of the problem of increasing labor productivity due to the increasing complexity of production technologies, increasing the level of physical and psychological requirements for a person together with the preservation (improving) of his health. Such increase in productivity can be achieved only in case of the rational (reasonable) behavior of the employee. Philosophers and economists have offered many competing definitions of the rational (reasonable) behavior. But almost all these definitions agree that a reasonable person seeks the most efficient way to achieve the goals [26, p. 330]. The negative impact of employee’s motivation on productivity can be resolved or at least reduced due to the increase of the value of such elements of human capital like health and education [5, p. 21]. The formation of the indicated values is determined by the presence of institutions.

Younger generation has become nowadays more rational, considered, can calculate possible consequences of the reasonable or unreasonable behavior, it has a growing understanding that provision of prosperous life is only possible by helping each other, preserving the natural environment and coordinating actions with others [15, p. 28]. The transition to an integrative economy provides the formation of evolutionary selection of behavioral patterns of the subjects, which is a very important consequence, since it reinforces the new positive form of socio-economic behavior of subjects [19, p. 126].

In this context, the issue of forming health-saving behavior from the standpoint of the theory of conventions becomes relevant. Following the norms is a precondition of rational behavior in accordance with the principles of the theory, despite the fact that the norms are thus considered to be exogenous, specified from the outside [17].

The theory of conventions does not study legal and recorded in a formal way rules much, the object of research here is agreement as a set of informal norms that constitute the "rules of the game", which is the interaction between people in a particular area of their activities. That is why it can be applicable to the study of processes of individuals’ health saving behavior formation which is affected to a greater extent by the impact of informal institutions. Theory of conventions is presented in institutional science in the works written by Ian R. MacNeil, Olivier Favaro, Francois Emar-Duvernet, A.N. Oleinik [17]. The use of the theory of conventions is determined by the fact that decisions in any sphere, including the field of health care, are located at the junction of the conventions. Strategy of public health and health care development, which is based on the introduction of the social model of health and quality of life, is based on the concerted actions of all sectors of society, including various communities in the interests of health development, intersectoral partnerships and developing joint strategic plans for health promotion [7, p. 41]. The theory of values (theory of the worlds) by Boltanski-Thevenot is the basis of the conventions, it identifies six principal orders of values [6, p. 70], adapted by us to the system of health care (table).
The table shows the characteristics of orders value in the system of health protection:

<table>
<thead>
<tr>
<th>The order of the value</th>
<th>Inspiration world</th>
<th>Home world</th>
<th>Civil world</th>
<th>World of beliefs</th>
<th>Market world</th>
<th>Industrial world</th>
</tr>
</thead>
<tbody>
<tr>
<td>Way of assessment (value)</td>
<td>Grace as a manifestation of faith and religion</td>
<td>Family traditions, contributing to the effective health reproduction, respect for elders</td>
<td>The collective interest, compliance with legislation in the sphere of health protection</td>
<td>Publicity, public opinion, &quot;fashion&quot; for health</td>
<td>Health as a commodity, an economic resource</td>
<td>The impact of production technology on health, safety, compliance of working conditions with the labour standards</td>
</tr>
<tr>
<td>Kind of relevant information</td>
<td>Emotional, religious canons</td>
<td>Oral, based on examples and cases from life</td>
<td>Formal norms of law in the field of health</td>
<td>Media</td>
<td>The cost of medical, preventive services, and healthy food</td>
<td>Measurable: criteria, statistics: parameters of occupational diseases</td>
</tr>
<tr>
<td>Basic relationships</td>
<td>Fanaticism</td>
<td>Trust, the authority of the elders</td>
<td>Equal access to health services as public goods</td>
<td>Prestige to be healthy</td>
<td>Purchasing capacity, utility maximization</td>
<td>Of Compliance with standards governing the condition of the workplace</td>
</tr>
</tbody>
</table>

Let us dwell on the characteristics presented in the table of values orders.

World of inspiration is strongly connected and defined by the presence of belief and religion. Study of the effect of religion on health confirms its positive effect. For example, the doctors of California medical center in San Francisco studied the effect of prayer on AIDS patients. Forty patients were divided into two groups. Many healers who practice different religions prayed for the first group, while the second (control) group was not supported by the prayers. Six months later the conducted analysis showed that the patients from the first group had visited the doctor rarely, they had been less frequently hospitalized and they described his state of mind as much improved.

The results of the research carried by Dr. D. Matthews shown the positive influence of religion on health in 81% of cases: religion prevents death from respiratory diseases, cancer, cardiovascular disease, risk of suicide [24, p. 292].

Characteristics of home world as a value order involve the study of the influence of family relationships on health. Lifestyle and home conditions influence the formation of health, but they in turn depend on family environment [4, p. 4]. The value of the family in shaping the health of its members is defined by a triad of factors: the level and structure of morbidity, socio-hygienic living conditions and psychological climate in the family [20, p. 158].

Family relationships affect mortality and other indicators of physical health. For example, in the Netherlands and the Scandinavian countries, marital relations have a positive impact on reducing the risk of falling into depression and commit suicide, as well as on the ability to live for many years. According to the results of studies of single men 35% more prone to heart disease, 75% more likely to suffer vascular lesions of the brain, also single men commit suicide by 88% more often [2, p. 97].

The value of the order of civil peace specifies the influence of formal institutions on preservation of health. Such institutions include compulsory and voluntary medical insurance, mandatory vaccination, etc.

To a large extent the behavior of the individual in the field of health is determined by the settings of the world of belief. The participation of politicians and prominent businessmen in the different kinds of amateur sports competition raises the prestige of sport and increases the degree of involvement of individuals in sports.

The market world leads to differentiation of access to health services. Income levels play a big role in modern society in limiting access of the individual to medical and preventive services. Poor people are less likely to seek medical help compared to the rich people, according to the study "Living conditions, lifestyle and health" carried out in 2001 in Russia than the poorest part of the population sought medical help 6 times less compared to the most rich citizens due to lack of money [9, p. 43].

Most researchers prove that the health status of the poor people in general is worse than the health of the rich people. In Fig. 1 and 2 compares self-assessment of health and the presence of cardiovascular diseases in the richest and poorest quintiles in eight countries who participated in the study "Living conditions, lifestyle and health". People from the richest quintile significantly more likely to describe their
health as "good" and "generally good" than people from the poorest quintile. The likelihood of cardiovascular diseases in the richest quintile is lower than in the poorest one. The analysis shows that 80% of respondents from the most wealthy quintile rate their health as "good" or "fairly good", and in the poorest quintile such assessment is given by only 39% of respondents.

During the self-assessment for heart disease 20% of respondents from the richest quintile noted the presence of such, it is two times less in comparison with respondents in the poorest quintile, where the results of self-assessment show that 40% of respondents has coronary heart disease.
This situation is a consequence of the fact that more wealthy people to a greater extent have formed health-promoting culture. They adhere to behaviors oriented to a long and happy life and have the ability to maintain health: to maintain a healthy lifestyle (eat well, exercise), to correct genetic factor (disease prevention), to limit the effect of environmental factors (choosing the best accommodation, materials, products) and to obtain better and more timely treatment if necessary.

The industrial world is the last of these worlds. Industrial environment is constantly improving with the development of industrial technology having a direct impact on the health of the individual. The influence of formal institutions (Labour Code, Federal law dated 28th of December, 2013 No. 426 of the Russian Federation "On special assessment of labor conditions" and others) and the mechanism of social partnership are aimed at improving working conditions. For example, in 2013, according to the FSS the number of accidents on production reduced in 68 subjects of the Russian Federation. However, the impact of formal institutions on health is limited with a transition of worker from the state of disease to the restoration of health, as confirmed by numerous studies on occupational diseases and their prevention. The approach, involving the movement "from health to further maintain and enhance" is the most justified in modern conditions. However, in this direction there is an acute lack of both theoretical research and practical developments [27, p. 243].

As far as the individual may act in the frames of several worlds, special consideration is given to the question of the relationship of these worlds as regards the process of health care.

The task is complicated by the fact that many areas are on the crossroads of different worlds. For example, the management staff operates on the border between at least two worlds – the market world (differentiation of remuneration, services of voluntary medical insurance, bonuses for healthy behavior) and the industry one (creation of favorable conditions of work, safety). In purely economic terms it is uncertainty that appears at the "joint" of conventions. Individuals find themselves unable to reconcile conflicting demands on their behavior in relation to health and to build correct assumptions about the actions of their contractors.

In the framework of this approach the following correlations of the worlds are analyzed.

Expansion is the ratio of conventions in which the organization of interaction takes place on the basis of norms of one of the conventions in those areas where previously the norms of other conventions dominated. In the field of health protection the market rules must not prevail [28, p. 113].

Good governance, more trust to society, a happy married life, more communication with friends and colleagues, guaranteed work of any kind are much more important than the increase in personal income by a few percent. But many sources of long-term happiness are not available as a result of decisions taken by the individual on the market, they become available only in the process of collective actions, including political ones [21, p. 220].

The task of the state in this context should be to restrain the penetration of the market world in other worlds, we should not reduce the degree of state intervention to the minimum level, it is in its efforts to ensure a high level of welfare of citizens should focus on the model of social market economy.

Tangency is a ratio of conventions, when the same interaction can be carried out on the basis of conflicting norms. The model of health care is a social market model in the modern economic system [22, p. 51]. Most of the functions assumed by the state, but in practice, most of the medical services are provided by the private sector (in the market world), partly it may be due to the fact that individuals do not have enough information about the possibilities of access to free medicine.

Compromise is the ratio of the conventions, where synthetic standards appear, removing the contradiction between the requirements of different conventions. In principle, health can be considered as an obligation of the company to everyone or as a private concern. If the society cares, then we should talk about medicine with doctors and hospitals. If health is a private concern we should talk about the necessity of will, mode and knowledge. Will cannot be inculcated, but it is possible to provide a person with knowledge and teach him the right attitude to medicine. The solution is to compromise: smart doctors should teach citizens proper behavior, and the state is to provide conditions for the maintenance of the weak and infirm people. The quality of care in all its forms (external and internal, material and virtual, from loved ones and from society in the most general view of its functioning) plays an important role in the process of rehabilitation [3, p. 20].
Another example of a compromise between these two types of conventions is conspicuous consumption when an individual in his consumer choice is guided by the maximization of utility not from consumption of goods or services, for example, from visiting the fitness club, but from the respect he gains by visiting prestigious institutions.

Thus, the rules generated by both formal and informal institutions of health care, should be regarded as a prerequisite of rational choice and its result. In other words, the choice of the rational model of healthy behavior can be implemented only within a particular regulatory environment, and in its absence the simplest market transactions become impossible.

For experimental confirmation of the hypothesis put forward by us about the importance of forming an effective regulatory environment a survey was conducted in January-February 2015 at the number of industrial enterprises of Perm and Perm region (JSC "Saranovskaya mine "Rudnaya", JSC "Motovilikhsnye Zavody", JSC "Barma", JSC "Perm Engine company"), the sample of respondents amounted to 511 persons. The results of the survey showed that 91% of respondents identify health with activity, vigor and good fortune in business. However, rational behavior in the field of health preservation, which is based on a healthy lifestyle, is held by only 20% of respondents, 35% believe that they do not lead a healthy lifestyle, 45% found it difficult to answer the question.

In the process of assessing their own health 63% of respondents said that in genera; they feel themselves good, however periodically experienced overload and fatigue. 37% of workers acquired a chronic illness while working at the studied company. 65% of respondents believe that their health has deteriorated as a result of a great scope of work in the enterprise (54%) and personal problems (11%). As the most important factors in maintaining health the following were identified: environmental factors (54%), nutrition (43%), a favorable moral and psychological climate and working conditions (43%), work schedule (33%), healthy lifestyle (21%), family relationships (18%), relationships with management of the enterprise (11%), good heredity (9%). However in accordance with the concepts "Public health care" and "Healthy Russia" the ratio in relation to our country is defined as follows:
- genetic factors – 15–20%;
- environment – 20–25%;
- medical support – 10–15%;
- conditions and way of life of the people – 50–55%.

Such discrepancies between the results of the survey and the results of the world experience indicate a lack of awareness on the factors that shape individuals’ health status.

Deterioration of health in recent times was associated by 57% of the respondents with poor working conditions, 37% did not think of the effects of working conditions on health.

A comprehensive solution of all identified problems will contribute to raising the level of health-saving culture at the enterprise, causing the need to adjust it from the side of the employer, the establishment of the information field for the employee, motivating inclusion of the employee in the health-saving process, formation of rational behaviour aimed at understanding of health value as an economic good.

References


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Влияние формальных и неформальных институтов на трансформацию поведенческих установок в области охраны здоровья

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В современных условиях в экономической науке до сих пор не выработано единого понимания роли здоровьесбережения в организации рациональной рабочей среды на предприятии. Целью написания статьи является рассмотрение вопросов формирования рационального поведения экономических агентов на уровне предприятия на основании взаимодействия формальных и неформальных институтов, результатом которого является трансформация ценностей в области сбережения здоровья на основе применения новых знаний. Гипотезой исследования является наличие влияния формальных и неформальных институтов на поведенческие установки в системе здоровьесбережения. В основе исследования лежит институциональный подход, позволяющий выявить особенности институциональных соглашений и ценностных порядков, рассматривая не столько юридические и фиксируемые формальным образом нормы, сколько соглашения как совокупность неформальных норм, в соответствии с которыми осуществляется взаимодействие между людьми в той или иной сфере их деятельности. Новизна исследования заключается в обосновании влияния ментальных моделей культуры здоровьесбережения на ограничение нерационального поведения работников предприятия. На основе систематизации научных подходов охарактеризована система формальных и неформальных институтов, влияющих на поведенческие установки здоровьесбережения. Для экспериментального подтверждения гипотезы о значимости формирования эффективной нормативной среды в январе-феврале 2015 г. на ряде промышленных предприятий г. Перми и Пермского края (ПАО «Сарановская шахта "Рудная", ПАО «Мотовилихинские заводы», ООО «Барма», ПАО «Пермский Моторный Завод») был проведен опрос. Результаты исследования ценностных установок работников предприятий Пермского края позволяют сделать вывод о существовании когнитивных ограничений, которые формируют нерациональное поведение в области охраны здоровья.

Ключевые слова: здоровьесбережение, формальные и неформальные институты, рациональное поведение, ценностные установки.

Просьба ссылаться на эту статью в русскоязычных источниках следующим образом:

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