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Methodology in the Modern Theory of Human Capital and Strategic Management of Human Capital

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Abstract

The purpose of the paper is to analyse the place of the methodology in the modern theory of human capital and its relationship with the methodology of strategic management of human capital. Based on the evolutionary development of conceptual ideas and provisions of the human capital theory, the categorical matrix of the modern theory of human capital is substantiated, where the intersection of such vectors as the level of scientific analysis and the angle of analytical consideration of the object of the human capital theory determine the logic of category location. The proposed structural understanding of the methodology allowed the author to build the hierarchical construction of the strategic management of human capital science, which defines the methodology of strategic management of human capital as a specifically scientific methodology. The developed structural and logical scheme in the methodology of the formation of human capital strategic management has five levels: identification, ideology, methodology, method, and optimisation. It includes the categorical matrix of the modern theory of human capital at the identification level. Further research of the topic is proposed to perform at the level

of the method and at the level of optimisation, as they are connected with practical tools of strategic management of human capital.

Keywords: methodology, theory of human capital, categorical matrix, strategic management of human capital

JEL Classification Codes: C18, J24

Introduction

The modern theory of human capital was formed in the 60s of the 20th century, when there was a problem of creating a qualitatively new workforce that would meet the requirements of its time and was suitable for complex knowledge-intensive production. The theory gained the greatest popularity among the Chicago School of Economics, the main provisions of which are set out in the works of T. Schultz (Schultz, 1971), G. Becker (Becker, 1993), and the central methodological setting the purpose of which was to explain economic processes based on the principle of maximising the benefits of individuals.

The genesis of the theory of human capital is a natural consequence of the economic development. Currently, from the standpoint of the theory of human capital, there are analysed the essence and structure of human capital (Juchnowicz, 2014), the processes of economic growth and sustainable development (Mikołajczyk, 2020), increasing the competitiveness of enterprises, regions, countries (Weresa, 2014), gender differences in professional development of employees (Tsymbaliuk et al., 2020), quality of human capital (Juchnowicz et al., 2018), etc.

The theory of human capital, which was created in the industrial age and was the basis for the analysis of processes and phenomena characteristic of this era, requires a revision of the basic provisions for the innovative economy.

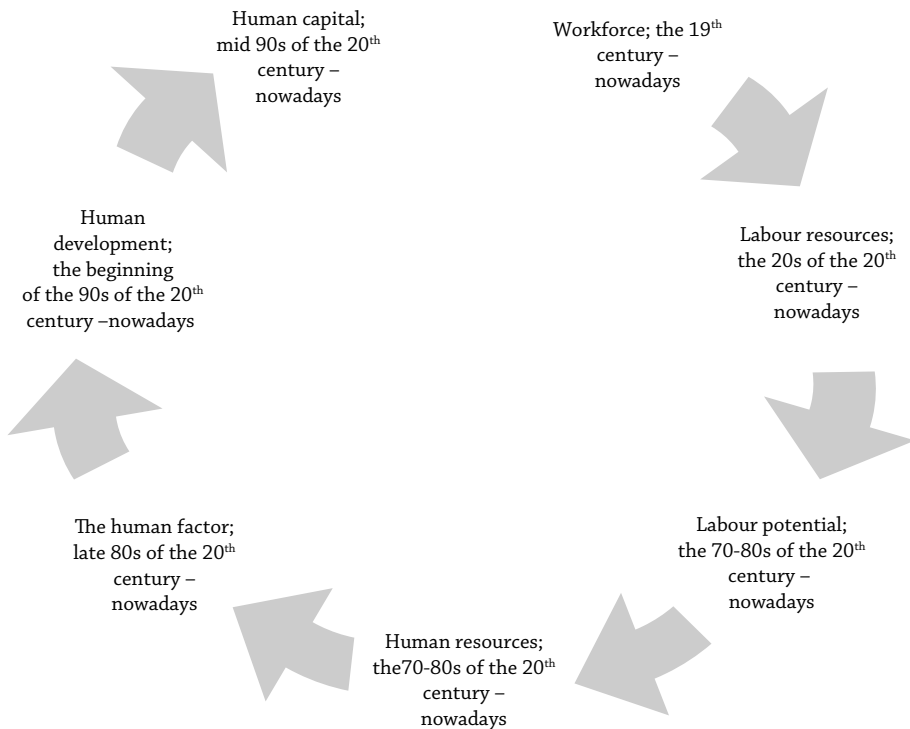
The human capital theory has become a natural result of the genesis of the world economic and philosophical thought. Its creation is due to changes in social and economic life of society in the era of scientific and technological revolution, when man became a decisive force in social progress and economic growth, the most valuable resource for economic development. There was a public need to create a theory that, on the one hand, would take into account the radical changes occurring under the influence of scientific and technological revolution, and on the other – adequately highlight the role and importance of man in new conditions and determine the development and use of his intellectual potential.

The discussion of the disorder of categories and concepts of the theory of human capital has been going on for a long time. It remains a topic of research for scientists around the world. Thus, the purpose of the article is to analyse the place of the methodology in the modern theory of human capital and substantiate its interrelation with the methodology of strategic management of human capital.

Categorical matrix of the modern theory of human capital

In the author’s opinion, terminologically the genesis of the modern theory of human capital can be clearly presented through the evolution of ideas, the role and place of man in economic life, which potentially determine system-forming characteristics of the formation and realisation of human potential (Figure 1).

Figure 1. Evolutionary development of ideas about the role and place of man in economic life during the period of active use of the scientific idea



Source: developed by the author on the basis of Hrishnova (2002), Juchnowicz (2014), Melnychuk (2015), Shkoda (2018).

The modern theory of human capital requires a theoretical and methodological rethinking of the categorical apparatus and scientific substantiation of the logic of the relationship and interdependence of its definitions, which should be formalised in the form of a categorical matrix.

Categorical matrices were proposed by sociologists (Furman & Biskup, 2011) on the basis of the vitacultural approach in socio-humanitarian science and on the classical principles of professional methodology (Furman, 2008) in various spheres of social production. The author believes that such a tool can be adapted to create a categorical matrix of the modern theory of human capital.

The coordination of the categorical apparatus of the theory of human capital lies in the plane of metatheoretisation. Based on the research of American sociologist J. Ritzer (Ritzer, 1994) in the study of the theory of human capital, metatheoretisation can be defined as a systematic study of the structures underlying the theory of human capital. In particular, there are three types of metatheoretisation (Ritzer, 1991): a) a prelude to the development of a theory (Mpr); b) the achievement of a deeper understanding of the theory (Mp); c) the creation of a unifying theoretical direction (Mo). Thus, the categorical matrix of the modern theory of human capital should cover all the above levels of metatheoretisation.

The combination of categories of the theory of human capital in the categorical matrix requires their analysis in all its multifaceted, multilevel, and polycontextual aspects. The logic of the location of categories in the proposed matrix is determined by the ratio of key vectors: the level of scientific analysis and the angle of analytical consideration of the object of the human capital theory, which determine the order of their coordination both with each other and between other categories in different parts of the matrix. The newly created categorical matrix is shown in Table 1.

In particular, the creation of the categorical matrix in the theory of human capital, according to the author, should be based on dividing the perspective of analytical consideration of the object of the human capital theory at appropriate levels: personal, micro, meso, macro, covering the levels of economic knowledge of human capital.

The peculiarity of placing categories in the matrix corresponding to the methodological level of scientific analysis, depending on the level of organisation of knowledge about human capital, is its expression through appropriate motives (human development, stakeholders' interaction, socio-economic feasibility, human norms and values). In addition, the practical level of scientific analysis corresponds to the processes of managerial influence on human capital (formation, commercialisation, implementation, reproduction), and the experimental one – the results of this transformation.

Table 1. Categorical matrix of the modern theory of human capital

Angle of analytical consideration of the object of the human capital theory	Levels of scientific analysis			
	Theory	Methodology	Practice	Experiment
Individual theory of human capital	An individual in society	Human norms and values	Formation	Human potential/ Human capital of an employee
Micro theory of human capital	A human in the labour system	Stakeholders' interaction	Commercialisation	Human capital of an organisation
Meso theory of human capital	Labour institutions	Socio-economic feasibility	Realisation	Human capital of a region/an industry
Macro theory of human capital	Labour	Human development	Reproduction	Human capital of a state

Source: own work.

At the theoretical level of scientific analysis, correspondence is established between the key categories of the theory of human capital: labour – labour institutions – a human in the labour system – an individual in society. Verbal indicators are established here, which allow one to consider the categorical matrix as an open system of commonly used categories with the observance of *methodological consensus*.

Taking into account the above-mentioned facts, the impact of the information economy and globalisation on human capital becomes important.

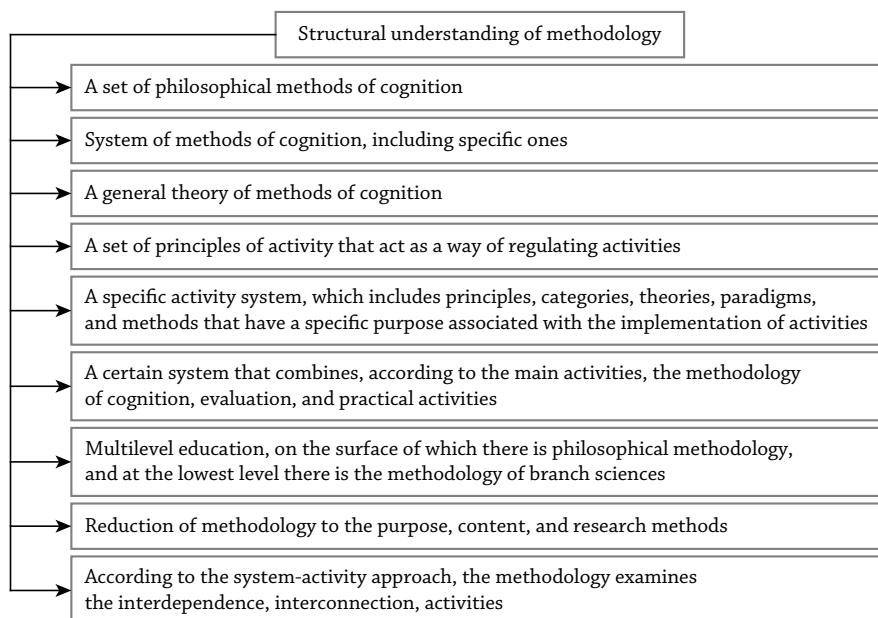
Methodology in the context of different angles of analytical consideration of the object of the human capital theory

Modern interpretations of the concept of the methodology are quite ambiguous. In particular, in a narrow sense it is often interpreted as a set of methods, and in a broad sense – as a study of concepts, theories, and basic principles of reasoning adopted in a given science. Researchers of methodology problems in modern science identify several options for structural understanding of methodology, which are systematised by the author in Figure 2.

If we consider methodology only as a set of philosophical methods of cognition, it excludes specific methods and techniques. When methodology is considered as a system of methods of cognition, including specific ones, then the methodological role of principles, theories, and paradigms is not taken into account. The definition of methodology as a set of principles of activity that act as a way of its regulation limits methodology only to such a component as principles.

Some scientists, such as V. Kokhanovsky, understand methodology as a general theory of methods of cognition: “Methodology as a general theory of method was formed in connection with the need to generalize and develop those methods and techniques that were discovered in philosophy, science and other forms of activity of people” (Kokhanovsky, 1999, p. 282). The limitation of this approach is that it does not perform regulatory and creative functions in scientific knowledge and practice.

Figure 2. Structural understanding of methodology



Source: own work on the basis of Iljin (2003), Surmin Bakumenko & Krasnejchuk (2010), Czakon (2013).

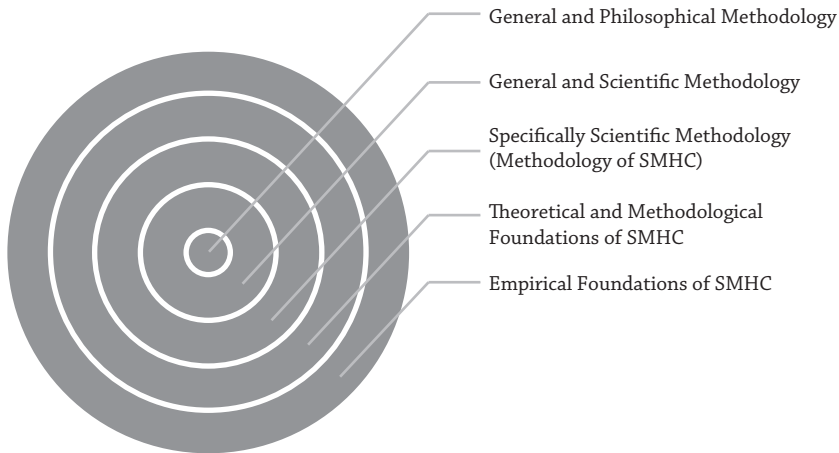
It is worth agreeing with Yu. Surmin and the co-authors (Surmin et al., 2010) and M. Blaug (Blaug, 2004), who believe that the most integrated is the understanding of methodology as a specific activity system that includes principles, categories, theories, paradigms, and methods that have a specific purpose associated with the implementation of activities.

Methodology in strategic management of human capital

If methodology is considered at different levels as a system of knowledge, the author agrees with the opinion of V. Andrijchuk that it is necessary to distinguish three levels of methodology (Andrijchuk, 2018). In view of this, for example, the

methodology of strategic management of human capital will belong to the lowest level of branch sciences but will also have empirical and theoretical-methodological bases (Figure 3).

Figure 3. Hierarchical construction of the strategic management of human capital science



* SMHC – strategic management of human capital

Source: own work.

The logic of scientific research is based on empirical experience, the results of which are transformed into theoretical developments, specifically scientific (branch sciences) and general scientific methodology, and finally – into general philosophical methodology.

A comprehensive analysis of the research problem revealed the need to develop a methodology for strategic management of human capital, which takes into account the properties, features of preparation, and conduct of strategic management of human capital.

The essence of the methodology of strategic management of human capital is reflected in the following provisions:

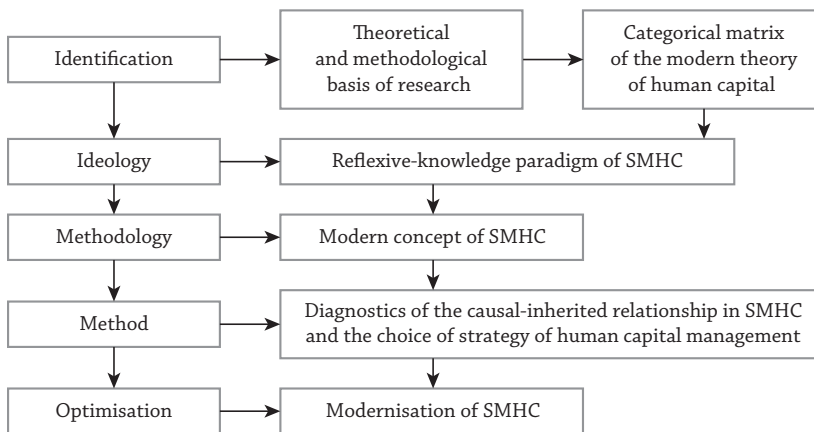
- the system of strategic management of human capital is a complex dynamic adaptive structure that operates in a reflexively active environment;
- strategic management of human capital is based on a set of indicators, presented in the form of a system or consolidated into one integrated indicator, and is a managed process;
- the degree of coverage of the objects of strategic management of human capital depends on the type of functional purpose of the management itself;

- the process of strategic management of human capital is considered in terms of purposeful and informed decision-making on the selection and application of certain methods for assessing the effectiveness of the system of strategic management of human capital.

The methodology should provide an appropriate basis for an adequate description of the object, prompting the conceptual model, defining a direction of development, prompting the criteria for evaluating options for solutions, prompting the functional scheme of management systems and algorithms of management (Ismagilova et al., 2012).

Based on the reflexive-knowledge paradigm of strategic management of human capital (Shkoda, 2018), the author developed a structural and logical scheme in the methodology of strategic management of human capital, which is shown in Figure 4.

Figure 4. Structural and logical scheme in the methodology of strategic management of human capital



* SMHC – strategic management of human capital

Source: own work.

The developed structural and logical scheme in the methodology of strategic management of human capital (Figure 4) covers five levels (identification, ideology, methodology, method, and optimisation). So, the level of identification includes the basis of theoretical and methodological research, the result of which is the categoryal matrix of the modern theory of human capital. The level of ideology is based on the reflexive-knowledge paradigm of strategic management of human capital (Shkoda, 2018), which is also based on a categoryal matrix at the middle level of the system. The following level of methodology covers the concept of strategic management of human capital, which is also influenced by the paradigm of strategic

management of human capital that is shown by the appropriate arrow. On the basis of the methodology, diagnostics of the causal-inherited relationship in the strategic management of human capital is carried out. It is based on the modern concept of strategic management of human capital. The next level is optimisation, where the modernisation of strategic management of human capital is made on the basis of the results of diagnostics performed on the previous level of the proposed scheme.

Conclusion and prospects for further research

As a result of the analysis of the genesis of the modern theory of human capital, the evolutionary progress of conceptual ideas and provisions of this theory from the origins of the classical political economy to modern interdisciplinary research is identified, paying attention to the innovative nature of economics.

Since the modern theory of human capital requires a theoretical and methodological rethinking of the categorical apparatus and scientific substantiation of the logic of interdependence and the relationship of its definitions, the author proposes formalising them in the form of a categorical matrix. From the author's point of view, there should be created such a categorical matrix in the theory of human capital in which the logic of the location of categories is determined by the ratio of such key vectors as the level of scientific analysis and the angle of analytical consideration of the object of human capital theory. The place of human capital in the system of modern tendencies of world development is also shown separately.

Constructive analysis of modern interpretations of methodology allowed the author to build a hierarchical structure of the strategic management of human capital science, which includes empirical foundations of strategic management of human capital, transformed into theoretical and methodological foundations of strategic management of human capital, specific scientific methodology, general scientific and general philosophical methodology.

The structural-logical scheme in the methodology of formation of strategic management of human capital is offered. It covers five levels (identification, ideology, methodology, method, optimisation), which have the appropriate content and are related to the overall research methodology.

Further research on this topic should be interrelated mostly with practical instruments of strategic human capital management that develop the levels of method and optimisation in the proposed structural and logical scheme.

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