

Conference Paper

Human Capital in the Siberian Remote Provinces: Digital Prospects

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Abstract

The aim of this study is to substantiate the need to interpret the concept of 'human capital' through the prism of the theory of passionarity with reference to such socio-spatial loci as remote Siberian territories. Based on the fact that in these conditions humanization is the primary national task, the most personally valuable and socially significant quality that should be potentially capitalized is vital business drive. At this stage of the study, the identification of carriers of the attribute of passionarity is carried out by the "snowball method", and a meaningful analysis of their life programs is carried out by the method of formalized interviews. The study revealed that the specifics of the formation of human capital in sparsely populated areas of Siberia are its fundamental multidimensionality, and it is the digital equipment of this process that gives real prospects for its implementation.

Keywords: Human capital, passionarity, digitalization, capitalization scenario.

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1. Introduction

The overall aim of the research program, which as an integral part includes the problems of this article, is to identify specific conditions and factors in the formation of human capital (hereinafter — HK) in the conditions of the South Siberian territories. The fact is that the uncritical application of the widespread principles for calculating the human development index gives a disappointing picture and perspective regarding this region. The main indicators of this index are, as you know, gross income per capita, life expectancy, development of the education system, gender equality / difference and some others. According to the UN, Russia ranked 57th in the world ranking. [9, p.15]

The Republic of Khakassia (hereinafter — RK), the object of our grant study, among the Russian regions according to the above indicators, takes places no higher than the 70th. [8, pp.190, 208–210] At the same time, it has practically no geographical, demographic and economic advantages that would allow it to claim any noticeable position in the field of investment in a highly developed person.

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Geographically, the republic is located 400 km south of the Trans-Siberian Railway, and the railway line to the capital of the republic (the city of Abakan) is not even electrified. This is an obstacle for both tourist and technological traffic to the region. Demographically, this is a fairly sparse territory (8.7 people / sq.km), more than 30% of the population of which is not urban. [7] And the largest city — Abakan — has only about 180 thousand people. [Ibid.]

The republic is economically depressed and has long been a subsidized region. A number of large city-forming enterprises have ceased to exist or have shrunk to the size of microbusiness. Major players in the modern economic field of Khakassia — the Sayanogorsk Aluminum Plant and 5 coal mining campaigns — tax residents in Moscow and abroad; and an attempt to force them to pay taxes in the republic provoked a stern rebuke in the Federation Council.

Political factors complicating the economic situation as a whole and the prospects for the development of human capital, in particular, include the election of the communist V.O. Konovalov as the head of the Republic of Khakassia, which at least did not simplify the dialogue between the regional authorities and the federal center. The fact of the election, which is recognized by most experts, was the result of public protests against the growing economic and social problems, and not at all the merits of the new governor. On the contrary, the new administration since 2018 has been making one mistake after another, causing one scandal after another, dropping its rating. [1] Among these errors is the “Varangian” principle of forming an administration: the Communist Party delegated a whole landing force of specialists to the republic from outside the region, and since then the team has been continuously in rotation, so people simply do not have time to figure out the specifics of the region they manage. This, among other things, creates problems for our research: among the research methods, an expert interview was planned in political structures, which, due to the lack of senior specialists with experience in the region, has to be constantly postponed.

Formal indicators of the education system are more optimistic. However, the sociological aspect here does not let you relax: contrary to vigorous reports, graduates of the local universities are not particularly popular with employers.

Thus, there is almost no demographic, industrial, financial, or administrative basis for the development of human capital in accordance with its classical understanding. However, paradigm correction allows us to look at the problem differently. Clarifications require a number of theoretical and methodological points, and we simply denote some of which, due to the lack of thematic space.

2. Methodology and Methods

Firstly, human capital as an economic category is replenished deductively from nation-wide indicators. For sociology, whose empiricism is built inductively, such a methodological strategy seems dubious.

Secondly, the country-by-country calculus of HC can create the illusion of a rigid determination of the generation of such capital by parameters and proportions. In other words, there is a feeling that a place in the ranking of human development automatically affects the regularity and intensity of the appearance and commissioning of highly profitable capitalized individuals. Perhaps this is true on large social arrays of tens of millions of people, where the law of large numbers applies. But large communities, such as Russia, consist of small ones, such as RK, in which big data does not work. Will M.V. Lomonosov in Kholmogory appear, or will not appear, was decided not by the dynamic, but by the stochastic type of regularity. Therefore, the picture of the world where human capitalization occurs in the Siberian outback should be built from chance. This means that the working language of empirical research of human capital in a sparsely populated province should be synergetics, not determinism. This, in particular, explains one of the strategic lines of our study, when business individual drivers are removed from the social environment for observation and interviews using the “snowball method”.

Thirdly, “motivation” from G. Becker’s reference definition [2, p.45] needs to be specified. If longevity or per capita income can be expressed in numbers, then the phrase “motivation”, at first glance, is a qualitative indicator that is difficult to put into the index. At the same time, everyone knows that almost all reference models of the “carrier of human capital” type (G. Hughes, G. Boeing, S. Jobs and many others) came forward thanks not to academic erudition, but to business drive, which Lev Gumilyov called passionarity [4, p.246].

Prejudice is quite common, as if passionarity is not calculable. That this is precisely a prejudice can be easily verified by comparing the type of passionarity in the objectivist and constructivist paradigms. Yes, there are cases when these paired paradigms give dramatically different pictures of reality, for example, “Russia-aggressor”. But in the case of a social portrait of a passionarity, these pictures almost coincide. Objectively passionarity is a carrier of the 7R allele of the DRD4 gene, which is called the “adventurous gene” [5, p.64.] Social niches for carriers are often extremism or criminal activity. But under favorable social conditions, the fate of a passionarity is manifested in the form of a scientific and entrepreneurial career.

Passionary in a constructivist view is a reputation that sets the carrier apart from the general social background, because passionarity, unlike hemophilia or a mole on the lower back, is impossible to hide. And linking the issue to the Siberian landscape only increases the methodological reliability of the empirical discovery and research procedures, since increased equipment with vital forces is an important factor in evolutionary selection here. The ability not only to survive, but also to crystallize business space around you in the difficult conditions of Russian economic legislation, history and culture is emphasized and tempered by natural and geographical conditions.

The only aspect that imposes methodological restrictions on the sample of our study is not a deficit, but an excess of demonstrative drive, characteristic of the social cohort of executing officials. Even Peter the Great demanded that "the view of the subordinate was dashing and silly", setting (or supporting) in this way the tradition of skillfully imitating passionarity, which flourishes to this day. Therefore, imitative practices in control systems should be studied specifically and using other methodological tools.

And finally, the fourth point, which concerns the features of the manifestation of HC in its digital concretization against the backdrop of a demographically and urbanly sparse Siberian landscape.

There are no direct indications of the specifics of the formation of HC in provincial areas in the works of the classics of this theory. But the general logic of reasoning on this topic is dotted throughout the entire discourse on the topic. Since the subject of capitalization is abilities and competencies that are in high demand on the labor market, abilities and competencies, the development of which requires exclusive technical and information support available only in large cities, the province by default should play only a secondary role, assume only the demographic function process support. "... Even a resident of a large European or American city has more opportunities to manage the income received than a resident of agricultural areas due to wider access to goods and services" [3, p.67]. Indeed, it was during the formation of the HC-theory, in the middle of the 20th century, that rural America rapidly migrated to big cities; and this happened before the eyes of Kuznets, Friedman and Becker. Until recently, the Russian hinterland also played the role of a demographic reservoir and a passionary donor of the capital and other megacities.

The theory-practice of HC in its administrative interpretation contains an anti-democratic meaning and purpose. This is the theory according to which stratification should occur (or intensify) on a professionally-competent basis. People had been ranked before very, very not very talented; it's just in a post-industrial society, where information is both a commodity, and money, and an ontological analogue of a person,

and, consequently, a social reality in general, the status of “carrier of the HC” acquires an economic, monetized equivalent.

But all polls cannot be carriers of the HC. There are always those who do not have talent, and those who have, but did not have enough strength, money or good luck. In classical theory, the emphasis is always on those who should be lucky. The rest — and most of them — are social slag, and their socio-professional mission is, at best, support staff.

And the theory of HC is almost at variance with practice. The reforms carried out in Russia over the past decade and a half have already implemented the old, classical theory: the destruction of rural schools and hospitals artificially and deliberately increased the outflow from the outback to cities, thereby showing that the population of provincial Russia is an expendable material for ensuring welfare big cities. Technocratic trends in public administration and corporate management are also a visible confirmation of administrative-compulsory transcription of the theory of the HC. And the income gap between top management and middle management, contrary to the “Kuznets curve,” is also visible evidence of this. It was assumed that the stratification on different grounds will extinguish tension between the layers, and people who are not rich in wealthy relatives will be able to use another competent social elevator.

Recent changes in the management establishment of the Russian Federation have shown that the administrative version of the theory-practice of the HC does not work well on Russian material. For example, a naive trick — renaming a child’s allowance into “maternity capital” (supposedly a special type of human capital) — does not force women to give birth more intensively. The erosion of passionarity from provincial territories takes on a catastrophic character, because the demographic replenishment of the province by the population in general and by passionate carriers of the HC in particular is currently slowing down or stopped altogether. Thus, the basis for the revision of the provisions of the human development program was not so much logical contradictions and semantic lacunae of the theory itself as its experimental testing.

But life, as always, is richer than schemes. It turns out that there is no person-in-general, there is a person in specific social and natural circumstances. There is no capitalization-in-general, there is an economic return on specific knowledge and skills used in specific circumstances. IT competencies are good in a metropolis, but in the middle of the Siberian taiga or the steppe, their usefulness raises questions. The objects of capitalization, that is, personality traits, which under certain conditions and investments can bring added value, are now the most unexpected predicates of a person. They can even be such parts of the body that are far from intelligence, such

as lips or ischial roundness. If you return to the 'digital' issues, the same example of 'unexpected capitalization' has become a child gambling. This personality trait is not just revealed — it's diagnosed as a mental illness or, at least, deformation. But some of these mentally ill children win computer game championships of countries, continents and the world, earning several million dollars each. Such a scenario of capitalization is not found in the literature on the issue.

The foregoing allows us to look more broadly and democratically not only at the pool of human capitalization scenarios, but also at the circumstances of digital capitalization specifically in remote provinces. The main, national problem and task here is the humanization of vast spaces; whereas the development of high-tech industries is associated with the above, and not an abstract and not an independent task. In this regard, the professions of the farmer and forestry are objectively more in demand for the region than those of the technologist of aluminum production or the programmer. The last two have firmly taken a place in the register of professions common in Khakassia, but these are still urban professions. Foresters and farmers are also met, but it is with these occupation-fastening areas that are related to the problem of transferring them to the category of high-tech and highly paid.

3. Results / Discussion

An illustration of the foregoing is the fire hazard situation in Siberian regions in the summer of 2019. In the previous 1910s during the next optimization, the profession of forestry technicians and foresters was greatly reduced, almost destroyed as a class. As a result, not only the implementation of fire prevention, but even just monitoring the fire situation was simply absent. The helplessness of the regional authorities (Krasnoyarsk Territory) in 2019 was expressed in distinguishing part of the forested areas covered by fires as "self-burning". During the interview, one of our respondents, a forestry worker, also complained about the shortage of rates in the industry and the need to service huge areas in this regard. And despite the fact that the earnings here are not very large, forestry workers proactively apply information technology in the monitoring of the conservation, health of forests and their protection from fires. Whether this is a capitalization scenario does not depend on the foresters themselves, but on those who determine the order and amount of financing for the industry.

The example shows that another factor interferes with the prospects of digitalization — the digital revolution as an anti-totalitarian, essentially anarchist project. It is well known that the design of the Internet initially included guarantees of non-control of

any formal social structures. But it is also well known what efforts are being made by governments of different countries to bring the Internet space under their control. In essence, we are now witnessing the next — digital chapter of the eternal discussion of the two polar concepts of management. The first pole is the concept of ‘steel’ power, organized vertically and gravitating to total regulation. The second is the concept of ‘silk’ power, organized horizontally, like a rhizome, and based on the self-organization and self-government of the population. Naturally, these are only pure standards, ideal types, and each of the real societies was or is only in the middle of this conditional scale.

In theory-practice of the HC, the effect of this scale cannot be overlooked. It all depends on who the investor is here and what are its motives. There are four of them: Family, Business, State and Auto-capitalization Man. The family, as a rule, takes the side of Man, although totalitarian options are found here. Business sees in the capitalized Man the prospect of returning “short” investments. But closest to the poles is the State and Man.

The state, no matter how humanistic declarations it may hide, is how an investor is forced to use the Cheka as a means of administrative control. Even now, when it is becoming increasingly difficult for the State to fulfill its social obligations — to ensure a continuously aging (remember life expectancy!). And population losing its professional certainty as a result of technological progress — explaining capitalization with the “to set a liberty” motive would be too much complacency. Transition to the NEP in the 1920s, post-war reliefs of 1945–1950, liberalization of the 1990s explained not by humanism, but simply by a lack of resources for control. And as soon as such opportunities appeared, control invariably tightened. Therefore, it is difficult to believe in the current humane creeps of the State in the field of investment in Man.

The only option when investing in a person is made for the sake of the person himself is autocalcapitalization. Here Man at his own risk and peril constructs himself and his future. The overwhelming majority of successful start-ups in Russia were carried out not because of, but contrary to social circumstances. Another confirmation of the theory of passionarity: what does not kill us, makes us stronger.

In the history of the confrontation between totalitarianism and anarchism, Siberia played a huge role. In the XVI–XIX centuries rebellious chaldons, Cossacks, schismatics, Decembrists, Poles, Stolypins farmers, Beria’s prisoners were drawn to the free spaces of Siberia and the Far East. In these difficult conditions, enterprise, activity and independence were not just meritorious qualities, but a condition for survival. But these bureaucratic corporations, which at various times were called “Muscovy”, “Russian

Empire”, “USSR”, “Russian Federation”, were constantly catching up with these elemental anarchists and trying to take on a control.

These poles to this day are combined in different variations, forming compromises of various configurations. And to this day, freedom of Siberia exists both in the constructivist and objectivist paradigms. Constructivistly, Siberia for “indigenous” Russia is a terrible taiga dark distance, where a sullen Chaldon or a cunning Yakut occasionally meet, wintering in a snowdrift in an embrace with a bear. Objectively, these are really large spaces that really make Russian sometimes gloomy and unsociable taiga, but at the same time with a satellite phone, GPS-navigator and a bunch of motion microsensors. By the way, one of these hunters, also our respondent, really made friends with a wild bear. Of course, there are real ‘science cities’ here — Novosibirsk, Tomsk, Krasnoyarsk, Vladivostok. But these are just points on the map, around which there is an immense geographic space that constantly needs proof that it is social.

The prospects of digitalization play a crucial role in solving this problem. A democratic project, originally embedded in the Internet, enables real, not declarative, independence. Now in the conditions of the Siberian hinterland, the ability and willingness to reformat one’s activities into digital mode is the same condition for evolutionary selection as the ability to adequately respond to the challenges of nature tens and hundreds of years ago. In addition to the above, an example of the introduction of high technologies in the field of animal husbandry is characteristic. Another of our respondents, Alexander P., a sheep farmer, one of the leading specialists in his industry in Russia, uses small-cattle chipping, turning the archaic shepherd into a control operator. 37 of 47 interviewed by us at the 1st stage of the study of ‘economic passionaries’ call active development of information technologies the key to their success.

Another conclusion of the study concerning local specificity and requiring commentary is the fundamentally multidimensional nature of human capitalization. The fact is that in the classical sense, the ‘urbanistic’ capitalization scenario resembles roulette: once choosing the direction of one’s development, a person concentrates on it, discarding other scenarios and thereby turning into a ‘one-dimensional man’ [6, p.145].

In the conditions of Siberian territories, the preservation and development of an individual’s competence diversity is not just a good wish for the realization of the ideal of a ‘harmoniously developed personality’. This, apparently, is an objective reflection of precisely the local specificity, when a person successfully realizes himself simultaneously in several forms. In this sense, the concept of ‘freedom of self-realization’ takes on

a completely different meaning than in a megalopolis. Again a typical example: the co-owner of the largest furniture production in Khakassia, Evgenia N., is also the chairman of the republic's motorsport federation, a novice farmer and mother of two children.

The latter is especially important: the professional deformation of the urban IT specialist is demographically unproductive loneliness. In Khakassia, as the expert confidently told us, the owner of the largest IT company in the region, young professionals are quite actively getting married, having children and even "engaged in the cultivation of garden plots". This is the real and natural multidimensionality of human development.

4. Conclusions

The significance of the results obtained during the study is seen 1) in substantiating the methodological correction of the theory of human capital in relation to specific socio-spatial features of its testing; 2) in substantiating the priority role of the emotive-volitional component in the developed human potential; 3) in demonstrating the specifics of the formation of human capital in the conditions of sparsely populated Siberian territories and the role that information technologies play in the prospects of this process.

The Siberian remote province is a sociospatial locus that implements the humanistic paradigm of the HC, the tool of which is information technology. The specifics of the formation of human capital in sparsely populated areas of Siberia are its fundamental multidimensionality. This is made possible by the entry of our society into the digital age. The multidimensionality of human capital should be studied separately and should be reflected as a separate indicator in calculating the human development index.

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