THE INFLUENCE OF PARENTS ON THE FORMATION OF THE HUMAN CAPITAL OF SCHOOLCHILDREN

Nina Shabrova

Abstract

Parents are a key agent for the formation and development of children's human capital. Parental investments influence not only the personal success of children, but also the social and economic well-being of the country. In conditions of limited family and personal resources, Russian parents must use the optimal ways to develop children's human capital.

The aim of the article is to analyze the features of parental investments in the human capital of Russian schoolchildren.

The empirical basis of the article is the results of a survey of the schoolchildren's parents (2019, Yekaterinburg n = 7281), expert interviews with teachers and school psychologists (2020, n = 30).

The article shows that parents of schoolchildren form human capital of children through investment in education. This is implemented through the choice of schools, teachers, organization of additional education. The article considers such investments as: direct and indirect; material and non-material. Two features of parental investments in the human capital of schoolchildren are highlighted: the combination different types of investments and the compensatory nature of them.

The conclusion is made about the variability of parents' strategies for forming the human capital of schoolchildren and its structural elements.

Key words: parents, schoolchildren, investments in the human capital, education.

JEL Code: J24, I26

Introduction

Parents are a key agent for the formation and development of children's human capital. As the researchers note, investment by parents affects not only the personal success of children, but also the social and economic well-being of the country (Barro & Lee, 2013).

G. Becker spoke about the importance of the family and parents as the main institutions for the formation of children's human capital (Becker, 1991). He proved the relationship

between the number of children and the quality of their human capital (Becker & Lewis, 1973.). Its main idea was that parents, based on the amount of available resources, plan the number of children and the amount of investment in the human capital of each child.

In the modern scientific literature, researchers are actively studying the impact of various types of investment by parents on the formation of children's human capital and the benefits of these investments for both children and parents. G. Becker, in addition to the importance of material investment by parents in the human capital of children, noted the importance of cost of time (Becker, 1991) and the propensity to invest (Becker & Tomes, 1979).

J. Heckman argued that parental emotional support for children is even more important for the formation of human capital than direct material investment (Heckman, 2008). M. Doepke and F. Zilibotti showed the features of direct and indirect formation of children's human capital depending on the parenting style (authoritarian, authoritative and permissive) used by parents (Doepke & Zilibotti, 2017).

A few researchers have analyzed the motives of parental investment in non-formal education of children. They concluded that parents invest in extracurricular education and other extracurricular activities of their children in order to form their cultural and social capital (Dhingra, 2019; Pavlenko et al., 2019).

Many studies of the last decade, based on the concept of human capital D. Heckman, justify the special importance of early investment in the human capital of children. (Heckman, 2011; Lee & Seshadri, 2019; Caucutt & Lochner, 2020). Scientists prove that investments in children made in early years are more effective than investments made in later stages of their development.

A number of works are devoted to the analysis of the quality of parental human capital (income, level of education, employment, etc.) and its impact on investment in children's human capital (Braun, 2018; Nyvlt, 2018; Shareef et al., 2017).

In accordance with Russian legislation, parents have an advantage right over all other institutions, organizations, and citizens to form the human capital of their children. They are responsible for forming the foundations of the physical, moral and intellectual development of the child's personality. Parents must, of course, have the necessary resources to implement these responsibilities. The investment of parents in the human capital of children is closely related to the capital of the family (parents). And here it is important to note one Russian feature: the absence of a direct link between income and the level of cultural and / or social capital of the parent (Uvarov & Yastrebov, 2014). In conditions of limited family and personal resources, Russian parents must use the best ways to develop their children's human capital.

The aim of the article is to analyze the features of investments in the human capital of children, which are used by parents of Russian schoolchildren. The research tasks are: 1) parents' investments in education, health, cultural, social capital and children's achievement motivation; 2) various types of parental investments in schoolchildren – direct/indirect, material/non-material.

1 Method

The empirical basis of the study was the results of a mass survey of students' parents in schools in Yekaterinburg (2019). Quotas are formed by city districts and school types. The volume of the sample totaled 7281 people.

The such direct investments as involvement of parents in home education of children, joint visits of parents with children to educational, cultural and sports events, conversations of parents with children about the choice of educational line and future profession were analyzed. And the indirect investments (partial or complete transfer of functions of formation and development of children's human capital to specialists and/or relatives) are evaluated. The importance of material investments (payment for additional education, measures aimed at improving the health, formation and development of children's cultural or complete transfer investments (payment for additional education, measures aimed at improving the health, formation and development of children's cultural capital) and non-material investments (time, education, social ties) is shown.

The obtained data were processed in the SPSS Statistics 22. To analyze the information, the frequency, correlation, and the cross tables (conjugation) methods were used. Frequency analysis method made it possible to study the structure of the parent's investment in the children's human capital. The correlation method made it possible due to the calculation of presence indicators (Chi-square) and strength of relationship (Cramer coefficient) to study the influence of socio-demographic characteristics of schoolchildren' parents on features of parental investment in the human capital of schoolchildren (age, income, education level, employment). The cross tables (conjugation) method made it possible to interpret the structure of the relationship between variables. The relations with asymptotical (two-sided) significance < 0.05 and the Cramer's coefficient > 0.200 were considered as substantial relations.

In addition, the method of expert interviews with teachers and school psychologists was used to assess the role of parental investment in the human capital of schoolchildren (December - January 2020, n = 30).

2 **Results**

The main activity of school-age children is formal school education. Hence, it is not surprising that parents begin to form the human capital of schoolchildren with the choice of school. According to the absolute majority of parents surveyed (85.1%), it is the formal school that provides the basic, necessary set of knowledge. It is important to point that the choice of school, in the opinion of parents, is not only a way of parental investment in education, but also in health, cultural, social capital and achievement motivation of children. The most important criterion for choosing a school for a child is the professionalism of teachers (86.9%) (tab. 1). This choice is due, in our opinion, to two important moments. First, the level of teachers' human capital is important for parents. The higher the professionalism of teachers (the level of their human capital), the better they can form the human capital of schoolchildren. Secondly, parents are ready to make additional investments to ensure that children's human capital can be better developed. For example, choosing a school with professional teachers can increase the parent's time and material resources to get to it.

One of our experts commented on this situation: *«Recently, parents are increasingly trying to send their child not just to school, but to a specific teacher. Parents' demands for the quality of school education are growing, but schools are not always able to meet these requirements. Therefore, those parents who have such an opportunity (material resources, connections, etc.) tend to initially give the child to such a teacher and be calm. To be sure that their child will be respected. To be calm that to their child will not be indifferent. To be sure that the teacher will be able to interest the child in getting new knowledge, motivate him to learn» (a teacher, a woman, 42 years of work experience).*

Tab. 1: The respondents' opinion about the most important criteria for choosing a school

Criteria for choosing a school	% of the
	answers
	number
Professionalism of teachers	86,9
Proximity to home	69,0
The presence of non-formal education associations (clubs and sections) in the school	39,4
Composition of schoolchildren	36,0
Material and technical equipment of the school	34,6
Lack of collection of material funds for the needs of the school	19,8
The status of the school	19,3
High rating of school	13,2
The ability to combine the delivery of a child to school with my daily route around the city	5,1
Other	0,6
Total	324,0

Source: author's calculation; total is more than 100 %, as far as respondents could choose more than one answer.

The 14th International Days of Statistics and Economics, Prague, September 10-12, 2020

It should be noted that the importance of professional teachers when choosing a school for a child does not depend on the age, income, level of education and employment of parents.

As our results showed that the level of professionalism of teachers is the most important when choosing a school for a child, it was important to study the sources of information about this. As our research has shown, most parents get information about the level of professionalism of teachers thanks to their social capital: through relatives, friends, colleagues. The data we have obtained correlates with the results of other studies (Kozmina & Sivak, 2018).

The second direction of parental investment in the human capital of schoolchildren is the involvement of children in non-formal education. It should be noted that the involvement of Russian schoolchildren in the system of non-formal education is quite high. According to the Monitoring economy of the education, on average, 67% of Russian schoolchildren attend various clubs and sections (Parents' participation in school education, 2017). Parents' involvement of children in non-formal education practices is focused on the realization of two functions: compensatory and developmental (Pavlenko et al., 2019). The sense of the compensatory function is to make up for the shortcomings of school education and is focused on additional classes in school subjects. The developing function of additional education is aimed at expanding the educational space of the schoolchildren, the formation of additional soft-skills.

As can be seen from table 1, the presence of non-formal education associations (clubs and sections) in the school is a significant criterion for choosing a school for 40% of parents. This, in our view, shows two moments. On the one hand, parents want to expand the channels of formation of children's human capital. On the other hand, it shows the desire of some parents to minimize their investment to the human capital of children (search for non-formal education institutions, their payment, time to deliver the child to institutions of additional education). It should be noted that the presence of non-formal education associations (clubs and sections) in the school as a criterion for choosing a school for a child does not depend on the age, income, level of education and employment of parents.

At the same time, the lack of non-formal education associations in schools does not stop parents to invest material resources and time in non-formal education of children. About 30% of parents surveyed noted that they not only organize visits the child to non-formal education but also participate in it. It is interesting to note that parents with a higher level of education are more active in this regard (asymptotical (two-sided) significance <0.05, the Cramer's coefficient = 0.200).

962

One of the experts said about the investment of parents in non-formal education of children: *«It is a Big mistake when parents do not involve children in additional education. We must find some way to make the child like it. An active life position of the parent is necessary. Naturally, we must maintain a balance: if non-formal education hinders, we must abandon it. But, thank God, we live in a world where you can agree on everything, find options… If parents try to do everything to make the child successful, they are always in touch with the teacher, helping the child and the teacher. The parents understand that if is not given to children good education now, he will find himself in a difficult situation. In the 9th grade, my pupil chose history as an exam. Her mother came to me and said that she would rather pay for a tutoring service now than pay for daughter education later at the University… Such investments are very effective…» (a teacher, a man, 11 years of work experience).*

Finally, I would like to draw attention to the fact that Russian parents invest in the human capital of their children as part of parenting and learning at home. To study this issue, we asked parents to note what activities they and their children have participated in over the past year. We divided the parents ' responses into two levels:1) parenting and learning at home associated with school and 2) parenting and learning at home out-of-school. The data in table 2 shows several important points. First, parents and their children are involved in a variety of activities aimed at building the human capital of schoolchildren. They participate in educational, sport events, social and ecological projects, visit museums, exhibitions, theaters, i.e. the parents to invest in the education, health, cultural and social capital of their children. One of our experts commented on this situation: «I am always grateful to parents and praise them for putting themselves into the child. Someone with children reads and it is visible, because they (children) can easily and clearly express their thoughts. Someone does not deal with children at all and this is visual because in the mouth of porridge and children cannot connect two words. There are a lot of problem children in terms of health now. If parents take the children to theaters, then children can tell about them. These children have a completely different outlook, compared to those children who are not involved. The success factor of children is directly related to the investment of parents in their children. Children, especially preschoolers and primary school children, can't do anything themselves and, of course, if their parents take them somewhere and play with them, it is immediately obvious... Let it be a little bit dancing, physical exercise (motor activity) and something intellectual: chess, English, some developmental classes. Children in whom parents invest can be seen immediately...» (a school psychologist, a woman, 21 years of work experience).

Secondly, the involvement of parents in various types of activities to form the human capital of schoolchildren is associated with the use of various parental resources: knowledge, money, time, social connections, etc. It is important to mark that some activities aimed at forming the human capital of schoolchildren require parents to activate non-material resources (knowledge, time). For example, training the children for participation in research/practice conferences, academic competitions participations. Other activities for the formation of human capital of schoolchildren combine both material (money) and non-material resources (time). For example, attending cultural and educational events (museums, exhibitions, theaters). Finally, it should be noted that parents were twice as likely to note their involvement in activities for the formation of human capital of schoolchildren out-of-school than associated with school (tab. 2). This, in our opinion, indicates a fairly high level of the propensity of parents to invest in the human capital of schoolchildren. Parents' motives for investing in children's human capital were well formulated by one of our experts: «Most parents who invest in their children understand that a child will not be successful in society if they do not have some solid knowledge and a good education. Competition in modern society is very high. In the days of the Soviet Union, we knew that everyone would be provided with a job, a flat, and so on, but this is not the case now. Now employers take the best, take the successful, look at their self-esteem, look at their ability to communicate, look at the baggage of knowledge» (a psychologist of the child development center, a woman, 23 years of work experience).

Tab. 2: The types of activities of parents and their children in parenting and learning at home

	% of the
The types of activities of parents	answers
	number
Parenting and learning at home associated with school	
Training for children before research/practice conferences, academic competitions	30,1
participations	50,1
Organizing and participating in non-formal education	27,9
Educational websites usage	23,7
Sponsorship for the benefits of school	20,8
School competitions arranging	18,4
Educational events (workshops, lectures, meetings, discussions) organized by city museums,	17,3
theaters, etc.	17,5
Social actions arrangement and holding	12,0
Total	150,2
Parenting and learning at home out-of-school	
Participation in sports events arranging	31,9
Helping in kindergartens, schools, leisure centres	55,1
Participation in ecological projects	22,4

The 14th International Days of Statistics and Economics, Prague, September 10-12, 2020

Participation in cleaning and gardening of their yard, home	38,3
Participation in social projects (helping children in need, elderly people, disabled, and sick people)	32,9
Helping with performances, concerts, movie screenings arrangements	23,3
Attending cultural and educational events (museums, exhibitions, theaters)	81,6
Total	285,5

Source: author's calculation; total is more than 100 %, as far as respondents could choose more than one answer.

The correlation analysis showed that the age, income level, level of education and employment of parents do not significantly affect the activity of parents in forming the human capital of schoolchildren. This is especially important in relation to the level of income of parents, because regardless of the material resources of the family, parents strive to form and develop the human capital of schoolchildren.

We found only a weak influence of the level of education of parents on involvement in such activities as training for children before research/practice conferences, academic competitions participations and the educational websites usage (asymptotical (two-sided) significance <0.05, the Cramer's coefficient = 0.200). The higher the level of education of parents, the more actively they are involved in these activities. This result is quite natural. For these types of activities, parents ' education is the resource that parents can invest in their children's human capital.

Conclusion

Parents remain the key agent of socialization of the younger generation. The quality of the younger generation's human capital depends on the parents' investments. The performed analysis of the features of investments in the human capital of children, which are used by parents of Russian schoolchildren, are highlighted two features of parents' use of investments in schoolchildren. The first feature is the combination of types of parent investments in the human capital of schoolchildren. Combining different types of investments makes it possible to increase their efficiency. The second feature is the compensatory nature of the investments used. Parents compensate for the limitations of some types of family resources (for example, material ones) by using others (for example, non-material ones). The highlighted features act as a mechanism for optimizing parents' investments. This mechanism provides a balance between the parents' desire to maximize the quality of the schoolchildren human capital and the parents' limited family and personal resources. Thus, we can conclude about the variability of parents.

Acknowledgment

The article has been prepared with the support of the by RFBR, project no. 19-29-07016 «Transfer of human capital of educational communities: from failure to success»

References

Barro, R. J., & Lee, J. W. (2013). A new data set of educational attainment in the world, 1950–2010. *Journal of Development Economics*, *104*, 184–198. doi: 10.1016/j.jdeveco.2012.10.001 Becker, G. S., & Lewis, H. G. (1973). On the Interaction between the Quantity and Quality of

Children. Journal of Political Economy, 81(2, Part 2). doi: 10.1086/260166

Becker, G. S., & Tomes, N. (1979). An Equilibrium Theory of the Distribution of Income and Intergenerational Mobility. *Journal of Political Economy*, 87(6), 1153–1189. doi: 10.1086/260831

Braun, H. (2018). How long is the shadow? The relationships of family background to selected adult outcomes: results from PIAAC. *Large-Scale Assessments in Education*, 6(1). doi: 10.1186/s40536-018-0058-x

Dhingra, P. (2018). Achieving more than grades: morality, race, and enrichment education. *American Journal of Cultural Sociology*, 7(3), 275–298. doi: 10.1057/s41290-018-0059-9

Doepke, M., & Zilibotti, F. (2017). Parenting With Style: Altruism and Paternalism in Intergenerational Preference Transmission. *Econometrica*, 85(5), 1331–1371. doi: 10.3982/ecta14634

Heckman, J. J. (2008). Role of Income and Family Influence on Child Outcomes. *Annals of the New York Academy of Sciences*, *1136*(1), 307–323. doi: 10.1196/annals.1425.031

Kozmina, Y., & Sivak, E. (2018). Scientific Parenting? What Parents Worry about and What Sources of Information They Use. *Voprosy Obrazovaniya / Educational Studies Moscow*, (2), 8–25. doi: 10.17323/1814-9545-2018-2-8-25

Nyvlt, O. (2018). The sociodemographic determinants of academic perfomance and early career in the Czech Republic. *Demografie*, *60*(2), 111–123.

Parents' participation in school education: choices, opportunities, and engagement (2017) / Ya. Kuzminov (eds.). Moscow: HSE Publisher. 32 p.

Pavlenko, K., Polivanova, K., Bochaver, A., & Sivak, E. (2019). Extracurricular Activities of School Students: Functions, Parental Strategies, and Expected Outcomes. *Voprosy*

Obrazovaniya / Educational Studies Moscow, (2), 241–261. doi: 10.17323/1814-9545-2019-2-241-261

Shareef, F., Khawaja, M. J., & Azid, T. (2017). Does parents' income matter in intergenerational transmission of human capital? A decomposition analysis. *International Journal of Social Economics*, 44(2), 267–283. doi: 10.1108/ijse-11-2014-0235

Uvarov, A. G., & Yastrebov, G. A. (2014). Socio-economic status of families and schools as competing factors of educational opportunities: the situation in Russia. *Mir Rossii*, 23(2), 103–132. Retrieved from https://mirros.hse.ru/article/view/4967

Contact

Nina Shabrova Ural Federal University 620002, Ekaterinburg, Mira st., 19 n.v.shabrova@urfu.ru