TIME AS AN ELEMENT OF STUDENTS’ HUMAN CAPITAL
Polina Ambarova – Garold Zborovsky

Abstract
Temporal characteristics of students are the important element of their human capital. Rational use of time allows to convert it into other elements of human capital. Time is transforming into educational, intellectual, creative capital, students’ health. The essence of the problem is the lack of understanding of students’ time’s role to develop their human capital. Another aspect of the problem is lack of development of conditions and practices of temporal behavior strategies’ forming in higher education.

The purpose of the article is empirical research’s results’ of students’ temporal behavioral strategies’ justification and interpretation. Goal achievement allows to: 1. determine the qualitative characteristics of students’ temporal capital; 2. understand the reasons of inefficient use of students’ time; 3. identify the educational resources to develop students’ temporal capital.

An empirical study is implemented by the methods of questioning of students, observation of educational practices in the Russian universities, analysis of documents.

The main results of the study are evaluation the temporal resources of Russian students, finding of the dominant type of their temporal behavior strategies, discovery of link between the temporal characteristics of students and their educational, intellectual and cultural capital.

Key words: students’ human capital, temporal capital, conversion of temporal resources, the use of time, temporal behavior strategies

JEL Code: JEL I23, JEL O15, JEL N34

Introduction
National higher education systems need high-quality human capital, not only the professors’ but also the students’ capital. The universities’ ability to respond to the challenges of nonlinear social environment is ensured by the new understanding of the resources at their disposal. Students are not just education groups and consumers of educational services. They are all
bearers of the unique human capital grown in the university environment and distinguished by its social time specifics. In the conditions of economic crisis and transition to information society a new special direction emerges in the search for new resources. These new resources include, according to Z. Bauman (Bauman, 2007), M. Castells (Castells, 2000), and J. Urry (Urry, 2007), social time in an incorporated state.

Time as an element of students’ human capital comprises such components as time budget, temporal skills and abilities, temporal behaviour strategies, age.

Efficient use of time (all the four of the abovementioned components) allows converting it into other forms of human capital such as education, intellectual, cultural and creative capital, students’ health. The result of this conversion is temporal investment which yields returns as substantial as profits on financial investment. The problem is that the process of temporal investment is not economic or technological, but social by nature. Hence, it is determined by students’ temporal consciousness and their understanding of the time potential for the development of their human capital. The abovementioned problem requires research and interpretation. Another aspect of the problem is how the university can create conditions for developing constructive temporal practices and students’ temporal culture.

The purpose of the article is to present the key findings of an empirical study into the temporal characteristics of the Russian students’ human capital. This allows: 1. determining the quality characteristics of students’ temporal capital; 2. understand the causes of inefficient use of time by students; 3. identifying the educational resources necessary for the development of students’ temporal capital. The theoretical background for the article comprises the concept of liquid (non-linear) modernity by Z. Bauman that describes the idea of liquid (non-linear) time and its role for social stratification and development of various social groups. The theoretical basis also includes J. Urry’s concept of mobility that shows how temporal characteristics (speed, temporal skills, and the ability to use them) create new opportunities in a mobile society, in the world of high speeds.

There have been some studies of various aspects of students’ human capital, its relation to social capital, academic achievement, gender, etc. (Meier, Favero & Compton, 2016), (Ince, 2015), (Gershenson & Holt, 2015), (Heaney, 2015), (Sabia & Rees, 2015), (Campbell, 2015). Russian researchers have investigated students’ time budget, their life plans, etc. (Bohan, Alekseeva, Shabalovskaya & Moreva, 2014), (Konstantinovskiy & Popova, 2015). The authors focus on the temporal dimension of students’ life as a reflection of their values, needs and interests. Studying students’ time in this case serves as an instrument for examining various
socio-cultural phenomena and processes taking place in the students’ environment (Zborovsky & Ambarova, 2015).

1 Methods

The empirical basis for the research includes the results of a questionnaire survey of students from 11 state universities in Yekaterinburg, one of the leading Russian educational centers. The Ural region has about 70 universities; the majority are concentrated in Yekaterinburg. The students’ questionnaire sample size was 1,200. A two-stage stratified sampling was used to represent all the major educational profiles (technical, natural sciences, humanitarian and socio-economic spheres). The sampling error was 3%.

Additional methods included monitoring educational practices in the Ural universities and analysing documents regulating the organisation of students’ life.

A system of empirical indicators was developed which allowed measuring the temporal characteristics of the students’ human capital. Three main blocks were singled out:

1. The students’ dispositions towards social time:
   1.1. The value of time, its place in the system of value orientations, its correlation with the other terminal and instrumental values.
   1.2. Understanding of the meaning of time.
   1.3. Temporal needs in various kinds of time, its structuring, planning (tactical and strategic, in personal and professional spheres).

2. Students’ social emotions related to time:
   2.1. Perception, sense of time.
   2.2. Emotional attitude to time and its increasing non-linearity.

3. The students’ actual temporal behavior:
   3.1. Skills of managing, organizing and using temporal resources.
   3.2. Stable behaviour patterns in different temporal situations (shortage of time, time uncertainty).

The methodology used had been tested in studies of such social groups as university professors, managers, freelancers, entrepreneurs and volunteers. These studies demonstrated the potential of this methodology to evaluate the Russian students’ temporal resources, to identify the dominant temporal behaviour strategies, to establish the correlation between the students’ temporal characteristics and their educational, intellectual, and cultural capital.
2 Results and discussion

One of the results of the empirical research was the identification of objects for temporal investments. In other words, the kinds of human capital that students convert their time into were identified.

_Educational capital._ Most of the students’ time is spent on learning activities. Motivated students spend up to 10 hours a day on learning: 6–7 hours of classroom learning and 2–3 hours of homework. 'Bad' students spend much less time on their studies – they miss classes, do not do their homework. This affects the quality of their education and therefore their educational capital. Moreover, approximately 15% of the students spend time on additional education.

_Professional capital._ In recent years, secondary employment of students has become common in Russia. Some of the important motives for choosing secondary employment for the Ural university students are: the desire to be financially independent (64%), to gain experience for future employment (45.4%), and to start a professional career as early as possible (26.9%). On average, students spend 15 hours of their free time a week working.

_Cultural capital._ Student visitors account for about 1/3 of the theatres’ and museums’ attendees. These are culturally active students who consistently allocate time for cultural activities in their time budget. The conversion of time into students’ cultural capital is both individual and organized: visits to theatres, museums, cultural centers can be part of the work plan for the student groups’ tutors and university activists engaged in the organization of non-educational work at the university. According to another group of students (65%), most of the time is 'consumed' by non-productive leisure: talking on the phone, communicating in social networks, playing online games. At their estimates, these students can spend 4–5 hours a day on inefficient leisure, sacrificing their sleep, studies, and household duties.

_Physical capital, health capital._ According to our data, about 54% of students occasionally engage in physical activities and sports, 34% do not spend time on this. About 12% systematically allocate time to physical exercise and sport. However, students’ physical capital and their health require not only physical activity, but also time to prepare wholesome food, to walk. But, according to them, they 'grudge' the time they spend buying and cooking healthy food.

_Social capital._ Almost all state universities in Yekaterinburg have student unions, volunteer associations; there are projects that integrate students in the civil society. The students surveyed (15 to 50%) are involved on a regular basis (15%) or occasionally (50%) in social activities. The time spent on this type of extracurricular activities is seen by students as an
important way to gain social experience, acquire useful contacts, develop their credibility capital.

For high-quality creative, cultural, social, and physical capital an appropriate motivation needs to be developed in students, related to perceiving time as a resource. In this regard, it was important to examine not only how much time is spent on this or that kind of capital, but also why the students do so – consciously or under the influence of some kind of irrational motives (imitation, family habits), and what it depends on.

Students’ understanding of the value of time was identified through correlation with other factors of success. Different time resources in *Tab. 1* are in italics.

**Tab. 1: Students’ evaluation of resources necessary to achieve success in life**

<table>
<thead>
<tr>
<th>What are the most important resources for your success in life?</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Money</td>
<td>3</td>
</tr>
<tr>
<td>The required amount of time and the opportunity to manage it in my own way</td>
<td>4</td>
</tr>
<tr>
<td>Family, relatives and their support</td>
<td>5</td>
</tr>
<tr>
<td>Age</td>
<td>11</td>
</tr>
<tr>
<td>Personal psychological qualities</td>
<td>2</td>
</tr>
<tr>
<td>Professional qualities</td>
<td>1</td>
</tr>
<tr>
<td>The ability to be at the right time in the right place</td>
<td>7</td>
</tr>
<tr>
<td>Luck</td>
<td>8</td>
</tr>
<tr>
<td>Friends</td>
<td>9</td>
</tr>
<tr>
<td>The ability to quickly adapt to changes in the environment</td>
<td>6</td>
</tr>
<tr>
<td>Intuition, vision</td>
<td>10</td>
</tr>
</tbody>
</table>

Source: author’s own work

As you can see, time was not given priority position – less important, but traditional resources, mainly professional and personal psychological qualities, as well as money, were ranked higher. This means a significant proportion of students do not consider time as a strategic capital needed to succeed in life. We believe it is not accidental, there are reasons for this. The data reflect the worldview, typical of other social communities. Our study of the temporal behaviour strategies of some social groups revealed that in most cases time as a value, as a capital has not yet manifested itself in due measure.

The philosophy of time as a basic element of students’ temporal behaviour strategies was also examined through the selection of aphoristic definitions and metaphors of time. The system of temporal metaphors was broken into three conceptual blocks: 1) time is money; 2) time is an external factor; 3) time is a factor in personal development. A contradiction was identified as a
result: the students rated highest the definition of time as a resource for personal and professional development (see Tab. 2), despite the fact that the answers to another question indirectly conveying the same meaning and function of social time (see Tab. 1) demonstrated a different understanding.

**Tab. 2: The definition of the essence of time**

<table>
<thead>
<tr>
<th>Meaning block</th>
<th>Choose the definition of time that matches your perception of the world or give your own definition</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>it is a resource for my personal and professional development</td>
<td>1</td>
</tr>
<tr>
<td>1</td>
<td>it is something more valuable than money</td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td>it is eternity out of human control</td>
<td>3</td>
</tr>
<tr>
<td>3</td>
<td>it is a chariot rushing into the future</td>
<td>4</td>
</tr>
<tr>
<td>1</td>
<td>it is money</td>
<td>5</td>
</tr>
<tr>
<td>2</td>
<td>it is a burden that should be filled with something and disposed of</td>
<td>6</td>
</tr>
<tr>
<td>9</td>
<td>your own answer*</td>
<td>7</td>
</tr>
<tr>
<td>2</td>
<td>it is a force that destroys me and my life</td>
<td>8</td>
</tr>
<tr>
<td>1</td>
<td>it is less valuable than money</td>
<td>9</td>
</tr>
</tbody>
</table>

* In 2/3 of the responses to the open question there were definitions corresponding to the second meaning block «time is a cure for a soul», «a gift that we must learn not to waste», «a teacher, a doctor, a murderer», «something a person should enjoy», «my path in life». Source: author’s own work.

The analysis of the data in *Tab. 2* shows the students’ generally positive perception of the time factor (the first five ranking positions were occupied by positive metaphors, the last three – by those containing negative characteristics). This is due to the fact that young people are more optimistic than other generations about the present. One of the main reasons for this is that they have a large reserve of life, biological time at their disposal. However, the findings suggest that students’ temporal consciousness is contradictory. On the one hand, they recognize and declare the value of time, on the other, treat it as an inexhaustible and insignificant resource in their real life, preferring to focus on other factors of success in life.

We can record that students are influenced by social norms: time cannot be spent in vain, so they believe that time is a resource for their personal and professional growth. But in reality, those who are motivated for efficient use of time do not have much of it. Many of the students experience a lack of time because they do not plan it, do not have diaries, and do not set any objectives for the future.

The survey showed quite clearly which spheres of life students are experiencing a serious shortage of time in. The first place is taken by a lack of time to rest, experienced by 40 % of the
respondents. 32% do not have enough time to satisfy their vital needs (sleep, food, and other physiological needs). Nearly a third of the students (30%) noted an acute shortage of time for personal development. The reasons for such a situation would seem to be on the surface. This is a serious amount of learning load (classroom and self-study), the majority of students combining studies and work, for some of them – taking part in active social life inside and outside the university. At the same time, the study found that the main reason for most of the students’ time deficit is the lack of effective time management skills.

Behavioral trends manifest themselves in certain temporal situations. In a situation of a lack of time most students (65%) feel uncomfortable, whereas 42% of the respondents feel good in a situation of compelled idleness.

Another behavioral indicator of the importance of time is the skill and desire to plan it. About a third of the students surveyed said that planning time is mandatory for any modern man, but even more respondents (49%) believe that it is not necessary for everyone (only for those who attach a special value to time). Almost 15% of the students generally believe that planning time is not necessary («whether you plan or don’t plan, life will still disrupt all the plans»).

More than half of the respondents only devise a rough plan in almost all areas of their lives, and do not plan time for socialising and meeting the physiological needs. Therefore, only a small proportion of students (13%) can accurately estimate the time needed to do different tasks, while the rest have to accelerate task implementation (59%) or extend the time spent (23%). The low value of planning characteristic of Russian culture is manifested in the students’ temporal behaviour and explains the absence of the need to improve time management skills in most of the representatives of this community. Only 18% of the students surveyed mentioned this as an urgent need, while about a quarter reported its absence. The analysis of the sampled students’ temporal behaviour strategies demonstrates the traditional ‘time issue’ caused by the lack of time management skills, and, most importantly, by the lack of intrinsic need to develop them.

Few of the students have a clear idea of who and where they will be in 4–5 years (after graduation). This is due to the high level of social and economic uncertainty in the Russian society. It is also connected with an unwillingness and inability to set long-term goals in life. Probably, such a situation may be normal for young people who are in search of themselves, of ways of self-realization, trying out different ways of self-identification.

**Conclusion**
Time as an element of students’ human capital comprises manageable and unmanageable components. Age cannot be controlled, whereas time budget and students’ temporal behavior can be influenced. To manage the students’ time, educational resources can be used, which includes means, facilities, forces and opportunities associated with the interaction of educational communities. These can be mobilized by the university administration to regulate problem situations.

Educational resources with a potential for developing the students’ time culture include educational programs, programs for specific training courses. Their goal is to build knowledge about the importance of the time factor, the temporal skills. The mechanisms for temporal organization of educational activities and the interaction between the university administration, faculty and students can also be considered part of educational resources. These can also include physical capacity of the university environment, its spatial, temporal and organizational facilities. The use of all these resources can contribute to optimizing the students’ attitude to their time.

Acknowledgment
The article has been prepared with the support of the Russian Science Foundation, project no. 16-18-10046 «Forming nonlinear model of the Russian higher education in the region in the context of economic and social uncertainty».

References


**Contact**

Polina Ambarova

Ural Federal University named after the first President of Russia B.N. Yeltsin.

Ekaterinburg, Mira St., 19, Russia, 620002

p.a.ambarova@urfu.ru

Garold Zborovsky

Ural Federal University named after the first President of Russia B.N. Yeltsin.

Ekaterinburg, Mira St., 19, Russia, 620002

g.e.zborovsky@urfu.ru